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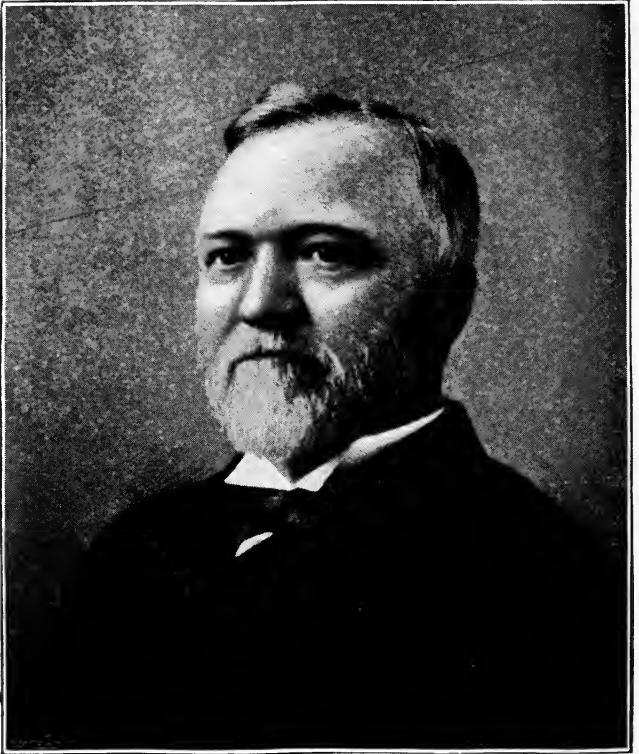
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ANDREW CARNEGIE.

SUCCESSFUL LIVES  
OF  
MODERN TIMES.

BY

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"LEADING POINTS IN SOUTH AFRICAN HISTORY"  
ETC. ETC.

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TO  
YOUTHS WHO ASPIRE

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# NOTABLE MASTERS OF MEN

## PUBLISHERS' NOTE.

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This book was originally published under the title **NOTABLE MASTERS OF MEN**. The new title has been given as indicating more clearly the aim and scope of the work.

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Biography is full of illustrations of the truth of this belief. Lowly birth is a barrier neither to knowledge nor to the leading of a successful or a useful life. There is no one so poor and so insignificant but that, should he possess the right qualities, he may make his way in the world, and become a master of men by acquiring that power of leading men in which true greatness consists. Neither self-progress nor

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# NOTABLE MASTERS OF MEN



## SECRETS OF SUCCESS

ONE of the fundamental beliefs of the late Sir Josiah Mason was that circumstances or conditions do not ultimately affect individual progress. These things, he admitted, might delay a man, but they would not permanently, or even for very long, bar his way. Obstacles, he held, are only an incentive to the right sort of man, and the pressure they bring to bear on such a man only nerves and strengthens him.

Biography is full of illustrations of the truth of this belief. Lowly birth is a barrier neither to knowledge nor to the leading of a successful or a useful life. There is no one so poor and so insignificant but that, should he possess the right qualities, he may make his way in the world, and become a master of men by acquiring that power of leading men in which true greatness consists. Neither self-progress nor

influence on others has yet become the special prerogative of the well-to-do. The wealthy manufacturer of to-day may have sprung from nothing, and been only the ordinary workman of a few decades ago, whose capital was represented mainly by intelligence, ingenuity, and an indomitable will. Other individuals whose names are associated with movements which, socially, intellectually, or spiritually, have affected the lives of thousands, if not millions, of people, and have taken a permanent place among the great institutions of the age, may have begun on a scale so modest and unassuming that neither they nor anyone else could possibly have imagined that results so great would follow from causes so small.

Lives such as these are always worth recording as a stimulus to those who may think the opportunities open to them afford no hope of their either achieving success for themselves or of doing good to others. Such records should, indeed, strengthen the hopes of the aspiring ones who find themselves at the outset of life with none of the advantages of birth, means, or connections at their command. From them may be drawn lessons of the value of patience, industry, self-control, organising power, and inventive skill. They tell us how good a thing it is to have a fixed purpose in life, to concentrate our efforts rather than to allow them to become too diffusive, to avoid rashness while



being ever on the lookout for new openings and fresh opportunities, and to cultivate that quiet indomitable spirit by which most of the difficulties we meet with in life are best surmounted.

Those who have no claim to genius may still exercise that capacity for taking "infinite pains" in which, Carlyle has said, genius really consists. It may be possible to take only a step at a time, but a succession of steps, kept up with steady perseverance, will generally bring one at last to the wished-for destination. It is said of the present Archbishop of Canterbury that when he was a boy he was sent by his father to a village a mile away to fetch a bag of nails. The shopkeeper produced the bag, which was so heavy that he could hardly carry it himself, and he dropped it at Frederick Temple's feet, exclaiming, "There, carry it if you can." The lad was determined that he would, if he could, and he found that by stretching out his legs, and raising the bag with both hands, he could just swing it forward two or three feet at a time. In this way, little by little, he eventually managed to get the bag over the mile of rough ground that lay between the shop and his home. It was exhausting work,—but he did it all the same.

There are many young people among us who have their bag of nails to carry in life, but a brave heart and a plodding perseverance will generally enable

them to succeed, even though the weight be such that they can go only a step at a time. Patient labours pursued indefatigably have far more to do with solid progress in almost every branch of human activity than dependence on brilliant achievements or so-called strokes of genius, and the youth who develops a "persistent earnestness of purpose" will have already taken the first step on the high road to success.

In some "Personal Reminiscences" which he gave in a lecture at Wisbech, in March 1901, his Honour Judge Willis, K.C., gave an interesting account of his own career. Before he was twenty-one years of age he said, he had passed six years in business in London, doing every kind of work, and ashamed of none, if it came within his daily calling. In a room in a basement where he could almost touch the ceiling he had entered £8000 worth of straw bonnets, hats, feathers, and ribbons in one day, and for nights in succession he heard the bells of St. Paul's strike twelve as he turned out to walk three miles to his house. He loved his master, he did not serve a board, and he was resolved never to leave until work was done. There were no penny omnibuses in those days to help him half-way over the three miles, neither did any of those dear friends come to him who talked of restricting the hours of labour. He continued his study of Latin and Greek, which he had begun to learn at school, and he

resolved to matriculate in the London University. He had no one to help him, but he set to work by himself, and passed in the first division in 1857. During that year he was never out of his room except to go to the religious services on a Sunday. In 1858 he passed into the Inner Temple, and began the study of the Law; but with the exception of £100 a year which he received for his maintenance and for expenditure on his books, the cost of his education for the Law did not exceed £10. In the years 1858 and 1859 he used to read Law during the day and classics during the night, to enable him to obtain his degree of Bachelor of Arts. Having passed the B.A. degree, he set to work to read Law night and day, and then, in November 1860, without anyone to help him, he came out in the examination first on a list of twenty-seven candidates. He was given fifty guineas a year for three years, and spent the first instalment in going into the chambers of an eminent pleader. Experience such as this showed, he said, the necessity of hard work, thoroughness, and perseverance for those who wished to get on in life.

Some years ago a Polish refugee found himself in London with practically no means whatever for his own support and that of his mother, who had accompanied him to this country. He found a Good Samaritan in an English artist, who advanced him some money so that

he could buy a stock of oleographs—then far less known than they are now—and sell them in the street. He got the oleographs, took up his position in Fleet Street, soon disposed of them, bought more, and then again more, and found there was a good sale for coloured pictures. As, with the help of his frugal habits, he accumulated a little sum of money, after paying off the sums lent him, he made a study of the art of colour printing, with the idea of producing coloured pictures and Christmas and other cards. He began in a small way, getting together some machinery and obtaining designs from various artists, and soon found there was a steadily increasing demand for his wares. Before long the business began to assume important dimensions, and the time came when he was able to give employment to the artist who had first befriended him, and was now himself in difficulties. To-day, thanks to indomitable energy and a readiness to take advantage of new openings, the enterprise begun by the sale of oleographs on the pavement in Fleet Street is represented by one of the largest firms of designers and printers in the United Kingdom.

Sir William Gray, the shipbuilder, to whose energy and enterprise West Hartlepool is mainly indebted for its prosperity, went there as a poor boy, with no more prospects before him than any other poor boy could have in a town which seemed to have lost its trade

and drifted into a state of chronic depression. As soon as the money he earned would allow, he opened a draper's shop, to which he added a tailoring department five years later. Hard-working and thrifty, he saved money, and within ten years had sufficient to start shipbuilding,—a business for which there was good scope in Hartlepool for anyone possessed alike of the needful brains and the needful capital. The concern prospered, and its projector found himself at last at the head of one of the most important undertakings of the kind in the North of England.

Individuals who obtain success like this are often spoken of as "lucky"; but, as a rule, "lucky" people are those who, by study, toil, or self-sacrifice, prepare themselves to take advantage of whatever chances or opportunities in life may come to them. In the same way the so-called "unlucky" ones are too often those to whom chances have come, but who have not had either the shrewdness to perceive them, or the energy to grasp them, or, it may be, have not cared to sacrifice the certain pleasures of the present for possible benefits in the future. The fact that "luck" generally comes to those who are most ready to help themselves should suggest what the nature of such luck in most cases really is. Critical moments come to us in life when the "lucky" men are ready to make the best use of their opportunities, and the "unlucky" ones are not.

The energy of the former leads to fortune, while the apathy of the latter makes them let their chance go by. "The world," says Pascal, "is full of wants, and loves only those who can satisfy them." The man who fails to discover and meet these wants, or who has offered the world merely what he himself has wanted it to want, is generally the first to seek our sympathy, because he has been "unlucky."

Among the boys attending the City of London School about the year 1850 there was one, named William Henry Perkin, whose greatest interest in life was the study of chemistry. He began it when he was quite a little fellow, and by the time he was old enough to go to the City of London School, he could hardly think of anything else. In 1853, when he was only fifteen, he went to the Royal College of Chemistry, and commenced, under Dr. Hofmann, a systematic study of his favourite subject, making such progress that two years later he became assistant in the Research Laboratory of the College. In the early part of 1856 the youth of eighteen, ever plodding steadily forward in his studies and investigations, made a discovery which, with others that followed, was to revolutionise the arts of dyeing and calico printing, and create a new industry which has spread throughout the world, and brought vast sums of money to those who have practised it. Curiously enough, too, he made this

discovery quite by accident, and when, in the study of theoretical chemistry "for its own sake," he was trying to do something altogether different! What he was aiming at was to produce quinine by synthesis, that is, by uniting substances to form a compound. What he accomplished was to produce, in the form of mauve dye, the first aniline, or coal-tar, colour on record.

Up to that time the coal tar left behind as a residuum in the process of gas-making had been regarded as a waste product. But when young Perkin informed some of his friends of the discovery he had made in Dr. Hofmann's laboratory, they saw its commercial value, and were only too ready to help him to turn it to account. In the following August his process of manufacturing mauve dye was patented, and within a year of the discovery there was a small factory at Greenford Green, Harrow (since greatly enlarged), where Perkin and some assistants produced mauve dye for sale, in the first instance to the silk dyers of London and Manchester, and afterwards to the calico printers.

The value of the discovery that Mr. Perkin had made was speedily recognised by scientists and manufacturers, and all who saw any chance of doing so hastened to profit by it. Before long many more colours were produced. In 1859 there was brought out a colour which was called magenta, after the battle

of Magenta, fought in that year. Aniline blue followed in 1861, violet in 1863, and so on until the list contained hundreds of different colours, shades or tints. Quite a number of these were added to that list by Mr. Perkin, who followed up his researches with unwearied zeal. He had powerful competitors in the Germans, who had set about making further discoveries, and securing new patents, on their own account. Indeed, the new industry was, if anything, taken up with even greater zeal and enterprise in Germany than in England. France, too, was soon in the running, so that by 1879 the total output of aniline dyes from the factories which had been erected in Great Britain, Germany, and France represented a total value of over three millions sterling a year. Since then there have been further very considerable expansions, and not only are coal-tar colours now known all the world over, but they are used for very many purposes besides the dyeing or the printing of textile fabrics. They are utilised, for instance, in the colouring of inks, writing papers, printing papers, wall-papers, soaps, cosmetics, toys, ornaments, and innumerable other articles of commerce or domestic use.

The art of making the most of one's opportunities has, too, been well realised by Mr. Jeremiah Curtin, who is chiefly known in the literary world of Great Britain and the United States as the translator of the



works of the great Polish novelist, Henryk Sienkiewicz, author of *Quo Vadis*, etc. As a boy, he did not receive much schooling, but, passing on to Harvard College, and without leaving America, he acquired a good knowledge of French, Spanish, Portuguese, Italian, Roumanian, Dutch, Danish, Swedish, Icelandic, Gothic, German, Finnish, Greek, and Latin. He also made considerable progress in Hebrew, Persian, and Sanscrit, and had begun to speak Russian. In 1864, when he was still only twenty-nine, he went to St. Petersburg, where he first obtained employment as a translator of polyglot telegraphic despatches, and was afterwards appointed Secretary of the United States Legation. During the four years of his stay in St. Petersburg he perfected himself in Russian, acquired Polish, Bohemian, Lettish, and Hungarian, and began Turkish as well. His command of practically all the dialects of Eastern Europe was still further strengthened during his travels there between 1868 and 1877, and how well he knew them is shown by the fact that at the celebration, in 1873, at Prague, of the five hundredth anniversary of the birth of John Huss, Mr. Curtin delivered an oration in the Bohemian language. He also acquired the various languages spoken in the Danube country, and Armenian and other tongues in the Caucasus. On his way back to America he stopped in the west of Ireland to pick up some of the

lingering traditions of Gaelic folk-lore; he passed on to the north of Scotland to do the same there; and then he proceeded to America, where he availed himself of his studies of the languages of the Indians to collect their traditions, and to carry out important researches on behalf of the United States Bureau of Ethnology. Amid all this labour he has given us volume after volume of translations from the Polish of Sienkiewicz, never being content until he had made that author as well known, and as much appreciated, in Great Britain and the United States as in his native land. Here, surely, is a man who has owed less to luck than to energy and persistence,—a man who must have learned to the full the value of the old saying, “Nulla dies sine linea.”

Another present-day illustration of the value of persistent effort is afforded by the career of Sir Edward Clarke, one of the most successful lawyers of modern times. He is the son of a goldsmith and jeweller who brought him away from school at the age of thirteen to help him in his business in King William Street, in the City of London. Young Edward's chief duties at that time consisted in running errands, or in helping to keep clean both stock and premises; but the work was far from laborious, and left him plenty of time for reading and studying. His perusal of Brougham's *Lives of*

*Statesmen of the Time of George III.* had already won him over to the fascinations of a political career, and, as he ran his errands, or dusted the clocks and cleaned the watches in his father's shop, he may have wondered if he would ever have a chance of becoming a politician himself. In any case he resolved to push on as well as he could, and to this end he devoted his evenings to reading in the library of the Royal Institution, or to attendance at some evening classes at Crosby Hall. So successful was he with his studies that in 1856 he won three Society of Arts prizes out of six awarded to the Crosby Hall classes. When in 1858 the University of Oxford began its examinations for non-members of the University he entered for them, came out at the head of the first division in honours, and was made the first Associate of Arts of the University of Oxford.

His father had hoped he would succeed him in the goldsmith and jewellery business, and he was faithful to it for four years; but he had formed higher aspirations for his future than keeping a shop. Pending the time when he could devote himself to politics he thought of becoming a barrister, if he could obtain a Tancred Scholarship, about which he had read in a book he happened to pick up in a second-hand book shop. Even with the Scholarship, however, if he could get it, he would need more money than his father

could afford to pay, and he concluded that he had better start in some occupation which would put money in his purse at once. In March 1859 he secured a post in the India Office, and there he stayed two years, working hard, doing much overtime, and attending also the evening classes at King's College. On leaving the India Office he began to read for the Bar; but in addition to working with a tutor he also became a newspaper reporter for a time, acting for *The Standard* and *The Morning Herald*, and making his first acquaintance with the House of Commons from the Reporters' Gallery. He was called to the Bar at Lincoln's Inn (as a Tancred student) in 1864, made a marked success, took silk in 1880, was first returned to Parliament in the same year, became a Bencher of his Inn two years later, and got his knighthood on being made Solicitor-General in 1886.

These are striking illustrations of success; but a further point to be borne in mind is the educational value of failures. Even with the greatest energy and the greatest persistence one may not be able to avoid disappointments; but failures will teach us what not to do, and they may suggest what we ought to do, sounding warning notes, and giving us facts or principles on which success may eventually be built up. The man who learns the lessons that are taught by his failures should eventually be able to record a

triumph which will atone for them all. "He that tholes (bears with patience) overcomes," is an inscription that William Chambers, in the days when he was a struggling lad, used to see over the doorway of an old house which he frequently passed, and it encouraged him to persevere until he found himself a partner in the great publishing house of William and Robert Chambers.

Alike in struggling and in failure, in want and in privation, the quality of cheerfulness may also be of inestimable value. Armenius Vambéry, in relating the trials of his early life, says: "In recalling these sad days I never ceased to wonder at the never-failing cheerfulness and high spirits which were my constant companions throughout, and helped me through all the adversities of life. My sturdy health aided me in the good fight, and did not allow my good humour to desert me." He wrote, too: "My constant good humour and happy disposition were of great help to me in all my straits, and, assisted by my tongue, were the means of procuring for me many a thing upon occasions when the attempts of others would have proved fruitless."

The careers of those who have raised themselves to the position of masters of men are the more deserving of study because of the peculiar conditions of the life of to-day. Never have the opportunities

for pleasure and the necessities for toil alike been greater than they are at the present time. The development of sports, the growth of travel, the increasing taste for and observance of holidays, the joys of cycling, and the disposition on the part of many people to regard work as something that can be done in the intervals of pleasure, are more or less inimical influences to that persistency of effort which has had so much to do with the success of most of those who have risen to eminence. While, too, the memoirs of many famous men of the past generation show the difficulties they experienced in getting hold of books, the productions of the printing press to-day are so abundant and so cheap that there is the danger of reading being regarded in the light merely of an intellectual pastime, and, even in the case of useful books, of far more being read than the mind can really retain or profit by. On the other hand, the struggle for existence, especially in those stations of life where advancing education is largely swelling the numbers of competitors, has never been keener, while there is every indication that the struggle, alike between individuals and between nations, will become still keener as time goes on.

There are thus two sets of great opposing forces at work to-day, bearing directly on the rising generation,—increased opportunities for pleasure and

recreation, physical or mental; and increased need for study, system, concentration of effort, and earnestness of purpose. Which of these two sets of influences will prevail, and to what extent they can be judiciously combined without material prejudice to future prospects, are points that are well deserving of earnest consideration.

By success in life, however, we do not mean merely material success. The idea that wealth alone will necessarily bring happiness and contentment is one of the greatest of delusions. Not long ago Miss Rockefeller, the daughter of the American Petroleum King, was in Vienna, whither she had gone to consult the doctors for an ear complaint. A representative of the *Wiener Tagblatt*, who interviewed her, said, after having asked various questions: "And now tell me, as you no doubt belong to the class of the most envied of all women, whether I may presume that you are happy?" The lady is reported to have replied: "Happy? Can one buy happiness with money? Are there not many things to make us quite unhappy which money cannot change? And then, are not the spoiled ones more sensitive to the principles of life than others? No, I am not happy, and you may tell it to all and sundry who envy me." The interviewer was surprised at this assurance, and suggested that Miss Rockefeller was a philosopher; but

she added: "Not philosopher, only thinker. It is poverty which, perhaps, taught others to think. I learnt it through wealth."

If persons of wealth are dealt with in the following pages they are persons who have had other aspirations in life than the mere accumulation of money for money's sake, while other illustrations which are offered of masters of men show that wealth is by no means essential to the achievement of the truest success in life,—if success may be regarded as the exercise of a powerful and useful influence over the lives and well-being of others.



## MR. CARNEGIE AND HIS MILLIONS

**I**N a short sketch he has written of his own remarkable career, Mr. Carnegie says: "It is because I know how sweet and happy and pure the home of honest poverty is, how free from care, from quarrels, how loving and how united its members, that I sympathise with the rich man's boy, and congratulate the poor man's boy, and it is for these reasons that from the ranks of the poor the great and the good have always sprung, and always must spring. Read the list of the 'immortals who were not born to die,' and you will find that, almost exclusively, they have been born to the precious heritage of poverty."

It was to such heritage as this that Mr. Andrew Carnegie—whose name naturally claims first attention among the once humble toilers who have attained to influence and affluence in the industrial world, and have sought to devote their wealth to promoting the public welfare—was born, at Dunfermline, Scotland, in 1837. The father was a master-weaver, who owned four damask looms, and employed apprentices; but the introduction of the factory system and of

the steam looms meant the ruin of the hand-loom business, and the day came when the father had no longer any work to do. He resolved to emigrate with his wife and two boys to America,—some relatives having already gone out there,—and settle at Pittsburg. Andrew was eleven years old when the family arrived in Alleghany City. There the father got employment in a cotton factory, and Andrew was taken on as a bobbin boy at a wage equal to five shillings a week. To earn this sum he had to leave home every morning before it was light, and he did not return until after it was dark. But he was proud to be able to earn money at all, he was determined to get on, and he felt sure that a change would come before long.

His next situation, which he got before he was thirteen, was in a factory where he was set to fire a boiler used to run a small engine. From the cellar he was soon transferred to the office, where he did clerical work; and then, at the age of fourteen, he became a messenger boy in the telegraph office at Pittsburg. The spirit with which he worked is shown by the fact that in order to make himself quite equal to the duties of this position he learned off by heart, as he walked along the street, the addresses of all the business houses at which he might have to deliver messages. He availed himself of his leisure moments in the telegraph office to become an operator, and he even

learned to take messages by sound,—an art which, though common enough now, had then been acquired by only two or three persons in the United States.

In the telegraph office his shrewdness and efficiency attracted the attention of Mr. Thomas A. Scott, superintendent of the Pennsylvania Railroad, who engaged him as his clerk and private telegraph operator at what seemed to him the munificent salary of £7 per month. Promoted to the position of private secretary, he stopped with Mr. Scott thirteen years. It was during this period that he made his first investment. Mr. Scott one day advised him to get £120 as soon as he could in order to buy some Adams Express stock. As the result of a family council the amount was raised by a mortgage on the house, the stock was purchased, and when, not long after, young Carnegie received a cheque for fifteen shillings, his first dividend, he realised how it is that “money makes money,” through the payment of interest on capital.

From that moment he resolved to become a “capitalist.” He soon had a further opportunity of investing, this time in the Woodruff Sleeping Car Company, he having introduced the inventor of the car to Mr. Scott, after making Mr. Woodruff’s acquaintance one day when examining the railway track. On this occasion he borrowed money from the bank, the manager of which, when he asked for

the loan, patted him on the back, and said, "You are all right, Andy." He made still more money by joining with some others in buying up an oil well, which proved very remunerative.

But the greatest opportunity of Mr. Carnegie's life came with his start in the steel business. He began as an employer by making iron railway bridges, to take the place of the wooden ones which were a constant source of trouble on the American railways; but, finding from a visit to England, in 1868, that the railways here were discarding iron rails for steel, he built at Pittsburg a plant for the Bessemer process of steel making—which process had not, up to then, been adopted in America—and turned his attention to the manufacture of steel rails for the American railways. The business expanded, and speedily assumed gigantic proportions. Mr. Carnegie and his associates erected or acquired one steel works after another; many other branches of manufacture, besides railway rails, were undertaken, coal and ore mines were bought up, special steamers were secured, and lines of railway laid down for the conveyance of raw material, while the company's wage roll eventually gave a list of no fewer than 25,000 persons. The profits of the Carnegie Company, derived from a group of works the like of which was not to be found anywhere else in the world, amounted in 1900 to no less than £8,000,000 sterling.

Mr. Carnegie's interest in this vast concern was bought out, in February 1901, by the United States Steel Combination, which had a capital of £230,000,000, and in some quarters it was "understood" that the portion of the purchase-money given to the creator of the works was "about" £80,000,000, though other authorities fixed it at £40,000,000. When one deals with such vast figures as these, a few millions more or less do not seem to be of much account!

But if Mr. Carnegie, the "bobbin boy" of 1848, has thus established his reputation as a maker of money, he seems to be still more anxious to show that he knows how to spend it wisely. He has expressed the opinion that it is a disgrace for a man to die rich, and he prefers to make benefactions during his lifetime rather than leave bequests to be carried out by trustees after his death. He looks upon himself as merely a trustee for the wise distribution of the money he has accumulated. So far, however, the list of objects which he is disposed to support is very limited. He has a dread of doing anything that will tend to pauperise people, and he has not yet included even such institutions as hospitals among those he has benefited. His gifts have, in the main, been devoted either to founding or assisting libraries or museums, or to the advancement of educational work. As regards the former, the number of such institutions he has pro-

vided or helped could hardly be told ; while in respect to educational work his donation of £50,000 to the new Birmingham University was regarded as an exceptionally noble one, until it was quite put in the shade by his gift of £2,000,000 for the benefit of the Universities of Scotland and the impecunious youth of that country desirous of receiving a University education.

But while showing this generosity to the land of his birth, Mr. Carnegie has not been unmindful of those who helped him to make his millions. To Pittsburg he has been especially liberal, and he has given very substantial donations there from time to time for the founding and maintenance of the library, museum, and institute which bear his name. In many other towns in America he has also set up libraries or kindred institutions. When he left the United States in March 1901, for Europe, almost his last act before his departure was a gift of £1,000,000 to be set aside as endowment for a fund for superannuated or disabled employés, while the income of a sum of £250,000 was to be spent in maintaining the libraries he had built at Homestead, Duquesne, and Braddock. In the course of a letter he wrote on this occasion he said : " I make this first use of my surplus wealth upon retiring from business as an acknowledgment of the deep debt which I owe to the workmen who have contributed so greatly to my success, Labour, capital, and

business ability are the three legs of a three-legged stool. Neither the first nor the second nor the third has any precedence, all being equally necessary. He who would sow discord among the three is an enemy of all."

Asked on one occasion what was the secret of success in life, Mr. Carnegie replied: "The secret of success chiefly lies in the determination to succeed, and the resolve that every repulse, every knock-down a man receives in the battle will only nerve him the more." "Unless, too," he further said, "a man knows how to manage those above him as well as those below him, he will never achieve supreme success." In Mr. Carnegie's own case there seems to have been throughout his career not only this determination to succeed, but a remarkable promptness alike in recognising his chances in life and taking advantage of them. Coupled with determination there was marvellous alertness, while the habit which (as exemplified by the story related of his telegraph messenger days) he acquired of doing thoroughly whatever he undertook must have been of immense value in enabling him to build up and keep in touch with the various branches of the vast concern he established. Few persons can hope to rival Mr. Carnegie as a man of wealth, but the qualities, at least, which enabled him to rise in the world are such as anyone who seeks to get on in life ought to have no difficulty in acquiring.

## THE FOUNDER OF MASON COLLEGE (UNIVERSITY OF BIRMINGHAM)

SIR JOSIAH MASON, who founded the magnificent College which in 1900 was merged by Royal Charter in the University of Birmingham, started life at the age of eight as a cake-seller in the streets of Kidderminster, and was in many respects a notable man. Possessed in a pre-eminent degree of keen business instinct, and capable of immense industry, he had devoted his indomitable energy to the accumulation of wealth, never allowing sentiment to stand in the way of increasing his store, keenly enjoying a good bargain, and, while ready to launch out into costly expenditure—when he felt certain of good returns—showing at the same time a regard for single sixpences which—until he came to be understood—gave him a certain local reputation of extreme niggardliness. He would pay for a thing just what it was worth, and his workpeople had to show that they were worth what they got. He toiled as hard as any of them, if not a great deal harder, and he lived in a style so unassuming, was so frugal in his habits, did so much of his work for and in the name



of other people, and shrank so much from publicity in general, that for many years he was practically unknown, and the fact of his being a man of wealth came, at last, quite as a surprise to most of his fellow-citizens.

All this may seem to suggest a narrow-minded type of man. But if Josiah Mason gathered in all the wealth that he could it was with the hope of some day being able to do with it all the good that he could. Like most men who have risen, he had a high appreciation of business success; but the profits he secured, whether represented by single sixpences or by thousands of pounds, were not made so that he could spend them on himself. His greatest aspiration in life, when he attained to the position of a successful business man, was to set up and endow, entirely at his own cost, and during his lifetime, a College which would enable the young people of both sexes in the Midlands to carry on their education beyond the point reached in the secondary schools, and more especially to secure to them the opportunity for systematic studies in sciences that have a bearing on industrial pursuits, his conviction being that "only by the acquirement of sound, extensive, and practical scientific knowledge can England hope to maintain her position as a manufacturing centre of the world." His eagerness to supply the means of obtaining such knowledge was all

the keener when he remembered the disadvantages under which he had himself laboured in his early days, and the practical experience he had gained of the service that science can render in the development of industry.

But, great as was his aspiration to provide a Science College on this basis, there was something else that seemed to have a prior claim on him. When laying the foundation-stone of the College, on 25th February 1875, he said: "I have always had a great desire to do some deed of love for the poor and helpless, and therefore my first care was to make provision for the aged and the orphans. This I was enabled to do by founding the Orphanage and almshouses at Erdington, and, this being done, I was at liberty to turn my attention to the project of the College." So the Orphanage and the almshouses were provided first, and then it was that the generous donor felt free to devote himself to the building and endowment of the College.

Such, then, were the greatest aspirations of Sir Josiah Mason, and such were the special objects for which he gathered in from his business all that he could make by it. He was much misunderstood during his life, and he will be misunderstood now unless this dual phase of his character is borne in mind. His friend and biographer, the late Mr.

John Thackray Bunce, for many years editor of the *Birmingham Daily Post*, once called his attention to two photographs he had had taken, and remarked to him that the mouth on the one was quite different from the mouth on the other. "Ah," replied Sir Josiah, pointing to the photograph which bore the sterner expression, "that is my business mouth."

It was, in fact, the mouth of one who, in his factory or in his office, was the keen business man—inventive, industrious, exacting, equally at home in great enterprises and small economies; an employer who was familiar with every detail, who supervised everything and everybody, who could himself do all that he expected others to do, who would treat well those who served him well, and turn off without scruple those who served him ill; an inventor, organiser, and money-maker who discovered a new industry with as much satisfaction as an explorer would discover a new country, and would enter as boldly as any explorer on the risks and uncertainties of what lay before him,—a man, indeed, who, in things both great and small, was almost the *beau idéal* of the perfect man of business.

The other mouth was that of the same person "after official hours,"—the man who cared nought for public life and little for public questions, who, when factory and office had been closed for the day, found his simple pleasures in a quiet home life, in the flowers in his

garden, in giving free play to the instincts of his naturally sympathetic nature, and in allowing his never-resting brain to dwell in his leisure moments less on further schemes for making money than on schemes for the spending of it in such a way as would best realise the great and beneficent purposes which had become the most cherished of his aspirations.

But before Josiah Mason got his money to spend he had to serve an apprenticeship to poverty and difficulties; he had to rise by industry and energy to a position of trust, and he had then, with the help of ingenuity, business aptitude, and peculiarly favourable industrial conditions, to attain to the position of one of the most successful of manufacturers. How all this was done will be best understood from a sketch of the chief incidents of his life.

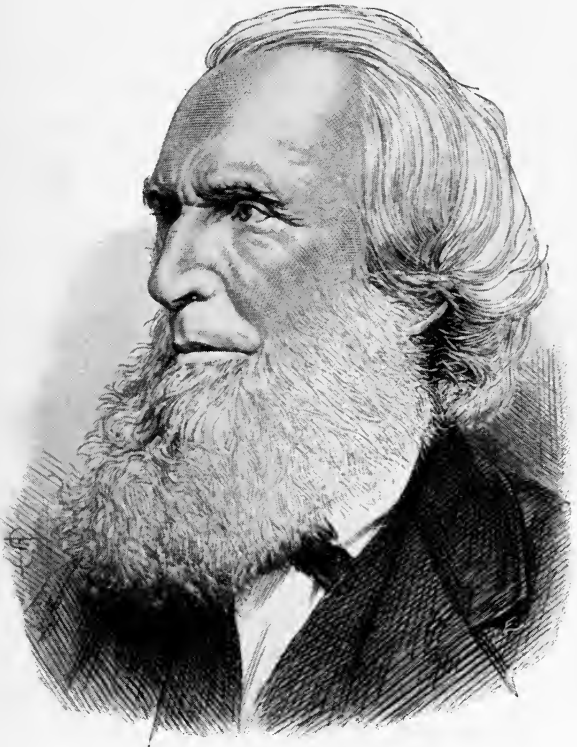
A long life it was, too, that he had, for though he died so recently as 16th June 1881, he was born so far back as 16th February 1795. The father was originally a bombazine weaver (bombazine, or bombasin, is a twilled fabric of silk and worsted), he was afterwards a carpet-weaver, and finally he became clerk to a carpet manufacturer in the town of Kidderminster. The limited means of Josiah's parents prevented them from letting him learn very much more than his A B C at a dame school in a cottage next door, and for the same reason they assented to

a proposal he himself made, at the age of eight, that he should try to earn money for himself. Provided with modest funds to start with, he bought some rolls and cakes from a baker at the rate of sixteen to the dozen, placed them in two baskets for which his mother had provided cloths of spotless purity, and then went out to sell them, either in the streets or at the doors of people's houses. He soon got a regular "round," and won favour for his cakes and an occasional extra penny for himself. He earned money, too, by making up for tradespeople their accumulation of coppers into five-shilling packets, his reward being one penny for each four packets. Allowed by his parents to keep the money he earned, he had sufficient before long to enable him to get a donkey, and he then turned the baskets into panniers, procured a supply of vegetables, and became a juvenile costermonger.

But he did not care for the street life, and he especially wanted some occupation which would enable him to stop at home as a companion to his brother, who was a hopeless invalid. Having closely watched a neighbouring shoemaker at work, he first turned cobbler, then he made a pair of soles, and finally he produced a pair of shoes; but he put in such good leather that he could not compete in price with the other shoemakers. Meanwhile he had taught himself writing, notwithstanding the long hours

he devoted to the shoemaking, and he not only wrote letters for people who could not write themselves, but even produced valentines, plain or coloured, obtaining in this way some additional pence, which he spent on books. His self-instruction he supplemented by attendance at Sunday schools. When he was about seventeen his mother opened a grocer's shop, and also a bakehouse for cooking Sunday dinners. Josiah helped in the shop, and looked after the dinners; but he longed for some settled occupation in life, and he tried successively carpenter's work, blacksmith's work, house-painting, and carpet-weaving. At the last-mentioned trade he remained about two years. Finding, however, that, although twenty-one years of age, and a "master," he could earn no more than £1 a week, he gave up the business.

His next step was to leave Kidderminster for Birmingham, where he took charge of a cheap jewellery concern which had come under the control of an uncle there, and was then on the point of collapse. Josiah devoted himself with great earnestness for a period of six years to the task of putting the business on a sound footing, being stimulated thereto by the uncle's promise that he should be taken into partnership. But no sooner had Josiah succeeded in his efforts than the uncle opened up negotiations for disposing of the business to someone else. Josiah



SIR JOSIAH MASON.





left the uncle at once, and he found himself, at the age of thirty, walking about the streets of Birmingham with nothing to do, and with a capital of only £20 on which to start life afresh.

Then came the turning-point in his career. Mr. Heely, a steel toy maker of Birmingham, and a member of the church where Mason acted as Sunday-school teacher, tapped him on the shoulder one day, said he had heard that he was unemployed, and suggested to him that he should call the following morning on Mr. Harrison, a split-ring maker, of Lancaster Street, who wanted an assistant. On seeing him, Mr. Harrison said somewhat brusquely, "I have had a good many young men come here, but they are afraid of soiling their fingers." Mason opened out his hand, looked at his fingers, and said to them, "Are you ashamed of dirtying yourselves to get your own living?" Mr. Harrison was so struck by the remark that, after asking Mason a few questions, he took him on, and told him to bring in his furniture and occupy the house adjoining the works (Mason was then married), as he was going to retire to a country cottage he had built for himself.

Mr. Mason was soon installed, and the business prospered under his management. Nothing had been said between himself and Mr. Harrison as to terms, and he took out of the concern what he needed for

himself and wife; but at the end of the year he suggested there should be a more definite understanding. Thereupon Mr. Harrison, who was the original inventor of split-rings, offered to sell him the business, which was a very good one. Mr. Mason, however, failed to raise the money, and then Mr. Harrison, who had made his competence, wanted to be relieved from all business care, and had a high opinion of Mr. Mason, told him he could take over the entire concern for £500, paying that amount out of the profits. This Mr. Mason was speedily able to do, and he very soon found himself launched in a business that offered splendid prospects. It was not long before his inventive skill had enabled him to introduce into the making of split-rings some improved machinery which brought him in £1000 in a single year.

It was, however, from steel pens rather than from split-rings that he was to make his fortune. He began producing barrel steel pens in 1827; but in the following year he happened to see a card of nine "slip" pens, made by Mr. James Perry, then of Red Lion Court, London, who had started pen-making in Manchester in 1819. For the card of nine pens 3s. 6d. was asked. Mr. Mason obtained a single specimen, and, simultaneously with Mr. Gillot (who had begun life in Birmingham as a jobbing

cutler), though working quite independently, he hit upon the process of making steel pen nibs by machinery, the slitting being done by means of the press, instead of by the old and uncertain method of "cracking." Mr. Mason made three pens by his new process, and sent them to Mr. Perry, who realised that they represented a complete revolution in the pen-making industry, then quite in its infancy. He went at once to Birmingham, and arranged with Mr. Mason that that gentleman should make pens for him, but stamp them with the name of Perry.

At first the orders executed by Mr. Mason were only small,—twenty to thirty gross at a time, while in those early days the slitting process was kept so profound a secret that Mr. Mason made with his own hands the discs and punches necessary, and allowed none but two or three workwomen to enter the separate room where this part of the work was done. He introduced other improvements later on. The business expanded rapidly, and Mr. Mason eventually found himself at the head of the largest pen-making factory in the world. When he disposed of his works to Perry & Co. Ltd. in 1875, he employed a thousand workpeople, and his output of pens was 32,000 gross weekly. It was computed that he always had on stock or in process of manufacture no fewer than 90,000,000 pens. Nearly all those he

produced, however, had been to the order of other persons, and stamped with their names; and it was not until a few years before he retired that he made pens bearing his own name, and so became recognised by the public as a penmaker. He also did a large business in making cedar-wood pen-holders, or "stick-holders," which he was the first to introduce.

Then, from 1842 to 1857, Mr. Mason was a member of the firm of Elkington & Mason, now known all over the world by the former name only. The late Mr. G. R. Elkington invited Mr. Mason's support in the development of what was then the new process of electro-deposition, and, although scientific men and business men alike urged him to have nothing to do with it, as it was "doomed to failure," he trusted to his own judgment, became Mr. Elkington's partner, advanced large sums of money, designed a great establishment in Newhall Street, Birmingham, to meet the demand he felt sure would eventually follow, brought all his business capacity to bear on pushing the discovery, and then patiently awaited the success which he knew would arrive in due course. Come it did, and with it the establishment of electroplating as one of the leading trades of Birmingham. He also embarked in a successful venture for establishing some copper works near Llanelly, South Wales, while his investments in commercial companies and

his judicious purchases of building and other land in Birmingham and elsewhere further contributed to swell the magnitude of his fortune.

Reference has already been made to the main purpose for which he gathered in all the wealth he could. In 1858 he began at Erdington, near Birmingham, a small institution as almshouses for twenty aged women, and an Orphanage for from twenty to thirty girls. He afterwards enlarged the Orphanage to accommodate fifty girls; but, still not satisfied, and desiring to have a large institution, under some system of public management, he offered to subscribe £100,000 for that purpose, stipulating, however, that the institution should be conducted on unsectarian lines. This condition led to difficulties which he solved by quietly building the Orphanage at his own expense, and in accordance with his own ideas. He paid £60,000 for the cost of the buildings, he endowed them with lands and property valued at £200,000, and, on 31st July 1869, in the most matter-of-fact way, he handed over the keys to a body of trustees, who were thenceforward to conduct the institution in the interests of the public. He had himself superintended the construction of the buildings down almost to the smallest detail, he had accomplished his design without asking for any pecuniary help whatever, and he provided for the

support, for all time, of three hundred orphans and twenty-six poor women, without leaving any excuse for an appeal to public charity.

In this way he had carried out the first of the two items on his programme of beneficence, and the course was now open to him to realise the second. Here, again, he relied on his own finances, personally superintended the preparation of the plans, and, as far as possible, the actual work of construction. He was resolved that the College should be perfect in regard alike to design, to materials, and to equipment, and neither money nor care was spared in securing those results. The site chosen for the College was in Edmund Street; on 25th February 1875 the foundation-stone was laid by Sir Josiah (he had received the honour of knighthood in 1872); and 1st October 1880 saw the formal opening in the centre of Birmingham of the splendid group of buildings then known as Mason College, built at a cost to the founder of over £60,000, apart from a generous endowment. The purpose of the College was "the promotion of thorough systematic education and instruction specially adapted to the practical, mechanical, and artistic requirements of the manufactures and industrial pursuits of the Midland District of England." By a supplementary deed the founder further provided that at some future date his College

might be affiliated to a University already established or thereafter to be established.

Sir Josiah Mason did not himself live to see the carrying out of this wise provision. His handing of the College over to trustees for the use of the public for ever formed a fitting close to the career of so remarkable a man. His life had been a splendid illustration of the value of self-help; and yet he had not depended upon self-help alone, for he held that self-help could only fully prevail through God's help.

"When," he once said to a visitor, "I have done everything that can be done, and see no clear way to the end of it, then I just say to myself, 'God help me. I have brought out all my judgment, my brain can do no more in this thing, so may it please Thee to give me a push.' And," he added, "I get the push, for as sure as I ask for help, help comes—some fresh idea, some new plan, and the thing gets done."

So it was that the founding alike of the Erdington Orphanage and of the Mason College "got done," and the humble cake-seller of bygone days found himself one of the most honoured of Birmingham's citizens. A few more years were granted to him, and at eighty he was still as active as many who are in the prime of life. But the inevitable infirmities of old age set in, and he died on 16th June 1881. His remains were interred in the mausoleum which stands in the grounds

of the Erdington Orphanage, where he once knew, and was beloved by, every one of the representatives there of the children who had the warmest place in his heart, and to whom he had conceded the first claim alike on his affections and on his fortune.

But though Sir Josiah Mason was not spared to watch over the further destinies of the College he had set up, he was able to leave them in the hands of men as public-spirited as himself, and fully equal to the task of directing them in such a way as to confer a maximum of good on the community. Under an Act of Parliament passed in 1897 Mason Scientific College (that being the name by which it was then known) was incorporated as Mason University College, with a new constitution and powers. But even this advancement was regarded only as a stepping-stone, for the Act expressly contemplated that the College might become a member of a University to be established, having power to grant degrees in Arts, Sciences, Medicine and Surgery. The movement for the setting up of such a University in Birmingham took definite shape in 1898, and by the end of the following year the fund which had been started reached a total of £300,000, including £50,000 from Mr. Carnegie and a like amount, altogether, from an anonymous donor. Still further donations came to hand, and a Royal Charter for the establishment of a University of Birmingham, with



faculties of Science, Art, Medicine, and Commerce, was obtained in March 1900. The Charter also directed that the University should be both a teaching and an examining one, and should further the prosecution of original research in all its branches. Then, in the same year, the governors of Mason University College obtained an Act of Parliament under which all the properties and liabilities of that College were transferred to and vested in the University of Birmingham.

This, then, is the final outcome of Sir Josiah Mason's aspirations, and there is no doubt that, as set forth in the report of the Council of Mason University College, presented to the Court of Governors of the University on 31st May 1900, "the special feature of the University, namely, the high value attached to the technical applications of science and the development of commercial education, would have commended themselves to the founder's approval as carrying out to a degree far beyond what he was capable of his precise intentions when he originally founded the College."

## “THE SALT KING”

THE career of the late Mr. John Corbett, popularly known as “The Salt King,” offers another example of a self-made man who, by dint of indomitable energy and perseverance, and by the faculty of making the best of his chances in life, attained to a prosperous position, and used his wealth to promote the well-being of his fellow-men.

The father of Mr. Corbett was a Shropshire farmer who migrated early in life to the Black Country. There he became an owner of canal boats which, in the days before the construction of railways, did a good business in conveying goods, merchandise, and raw products between the Midland Counties and London, Manchester, Liverpool, and other parts of the country. The boats were called “fly-boats,” on account of what was then considered the “rapidity” with which they did their journeys. John Corbett was born in 1817, and, after a very brief schooling, he began at the age of ten to take part in the navigation of his father’s boats between Brierley Hill and London. Such spare time as his occupation

left him he devoted to reading and study. He was especially interested in mechanics, and a few years later on he left the canal trade for a time, and drove an engine at some works not far from his father's house. He soon returned, however, to the boating business, acted as clerk for a time, and was then taken into partnership by his father. The concern was thenceforth carried on as “Corbett & Sons,” John Corbett being one of six children, five of whom were boys.

But the advent of the railways seemed to pronounce the doom of the canal-carrying trade. About the year 1845 the partners in Corbett & Sons sold out, and at the age of twenty-eight John Corbett started life afresh by becoming a manager at the Stoke Prior Salt Works, situate a few miles from Droitwich. Truth to tell, however, his new business did not seem at that moment any more promising than the one he had left. No fewer than eight individual proprietors and two companies had carried on the Stoke Prior Works at different times, with such little success, or rather with such an entire absence of success, that the two companies alone had, between them, lost a quarter of a million sterling. What a man who had previously devoted his energies to canal boats could do in the management of salt works, about which he knew little or nothing, and

where so many experts had failed before him, was altogether uncertain, and it may have appeared to John Corbett's friends that he had better have kept to his boats after all.

But young Corbett knew what he was about, and there was this in his favour,—that, if not already an expert in salt, he had not the prejudices of an expert. He brought an entirely fresh mind to bear on the subject. Taking nothing for granted, but wanting to know the why and the wherefore of everything, he made so thorough an investigation that he soon discovered the chief causes of the previous failures. The dissolution of the second of the two companies had, in the meantime, led to the works being offered to him by the bank into the possession of which they came, and he took them over, practically staking everything he possessed on his self-confidence that he could make them a success. He gathered around him the men he thought best able to help him, and he was so unremitting in his own attention to the smallest details that for a considerable time he was scarcely ever away from the works, even sleeping there at nights. One of the greatest difficulties, it seems, had been experienced in raising the brine through strata full of fresh water springs, doing so in such a way that this fresh water would be prevented from mixing with the brine and, consequently,

increasing the cost of the evaporation in the salt pans. This and other problems Mr. Corbett was able to solve, and in course of time he rebuilt the works, introduced all kinds of improvements, and eventually saw the previous output of 26,000 tons of salt per annum increased to over 200,000 tons, while the amount paid away every year for railway and canal dues was raised to no less than £100,000. The secret of his great success was once disclosed by Mr. Corbett himself in the following words:—

“Grasping the mechanical, commercial, and economical problems to be solved; personal mastery of details; excellency and adaptation of machinery for economy and efficiency of production; and excellence of quality in the article produced.”

In becoming so prosperous a “master of men,” Mr. Corbett was in no way unmindful of the interests of those around him. When he took over the concern the wages paid were so low that wives and daughters worked with husbands and fathers in order to get sufficient money on which to keep house, while the former proprietors had favoured the employment of women in preference to men because they worked for a lower wage. Mr. Corbett took an early opportunity not only of declaring that women should no longer be employed in an industry not suited for female labour, but, what was still more to the

point, of paying the men such a wage that the wives and daughters could thenceforward stop at home and look after the house.

For this alone Mr. Corbett was entitled to be regarded as the benefactor of his people, and their appreciation of it was shown some years ago by the placing in Stoke Prior Church of a window commemorative of his abolition of female labour at Stoke Salt Works. But his action in this respect was only an item in a long list of good deeds. Not only did the works themselves become "model" works, but Mr. Corbett erected comfortable dwellings for his workpeople, and he provided them with garden grounds, excellent schools, a dispensary, and a club and lecture room. His general benefactions included the establishment of the Corbett Hospital at Stourbridge, and numerous gifts to churches and deserving institutions in the Midlands. At Droitwich—famed for its saline baths since the times of the Romans, and especially visited by health-seekers since the days of William IV.—he erected the St. Andrew's Brine Baths and Salters' Hall, and in other ways helped to secure for the town that largely increased favour it now enjoys as a health resort. Of his various other benefactions, of his parliamentary career, and of the assistance he rendered to many public movements, undertakings,

and institutions, there is no need to speak in detail. It was, altogether, a well-spent and most honourable career which was brought to a close on 22nd April 1901,—a career that well deserves to be held up as a model for imitation, and especially as showing what good results may follow from the application of intelligence, dogged perseverance, and unwearying personal attention to even apparently forlorn hopes.

## THE RISE OF TANGYE BROTHERS

THE Tangye Brothers, whose workshop at four shillings a week, and their one workman engaged tentatively for three months, developed into the Cornwall Works at Soho, Birmingham, extending over twenty acres, and employing 2000 workpeople, have owed nothing to "luck" or "chance." The stock-in-trade with which they started on their career consisted of active brains, willing hands, and a determination to make the best possible use of the talents and energies which God had given them. They did not wait for Dame Fortune to come along and put something in their hands. Never despising the day of small things, they plodded steadily on, step by step, bringing alike intelligence and perseverance to bear on everything they did, finally achieving their marvellous degree of success "by the exercise," as Sir Richard Tangye has said, "of patience, determination, and self-control, combined with great industry both in the conduct of business and in mastering the principles upon which its success depended."

The Tangyes belong to an old Cornish family noted





SIR RICHARD TANGYE.



for its high moral worth rather than, prior to the present generation, for its worldly prosperity. The grandfather had been an agricultural labourer, who saved sufficient to obtain a plot of land, and the father started life as a miner, but became a small farmer and shopkeeper. Each was a man of high principles and sterling character, and these qualities were a better heritage for Richard and his four brothers than gold and silver and great estates would have been. In the circumstances, however, there was no reason for supposing that the lads would become more than ordinary workmen, after the example of others in their station of life.

In the case of Richard, it is true, he was shut out from manual labour by the fact of his breaking an arm when he was still a schoolboy of nine, and he was given a better education than the others, and turned into a pupil teacher at fourteen. The eldest boy, James, was bound to a country wheelwright, Joseph was placed with a shoeing smith, and the worthy father failed to understand why his sons should be dissatisfied with the destinies in life which he thought he had thus properly arranged for them. But each of the three—and it is with these three brothers that we are chiefly concerned—had higher aspirations. Richard wished to enter on a commercial career, and the *Autobiography of Benjamin Franklin* inspired

him with the courage and determination to push on in life, and attain a higher degree of success than seemed possible in the circumstances in which he was then placed. James and Joseph both wanted to become engineers, and they spent their leisure time in a little workshop they had fitted up at home, where they made working models of engines and various machines. The father thought they were only wasting the candles they used, but the mother saw a natural bent in their minds which deserved encouragement, and certain it was that they already began to show a remarkable gift in the way of making or inventing mechanical contrivances. Thanks to this gift, James was able, when he had served his time with the wheelwright, to take an engagement as a maker of machinery for the Safety Fuse Company.

When Richard was eighteen he gave up teaching, and got a situation as clerk, at a salary of £50 a year, in a small engineering establishment in Birmingham. He reached that town in the last week of 1852, and he had not been there very long before he concluded that the mechanical talent of his brothers, Joseph and James, would find better scope in a busy manufacturing centre such as Birmingham than in Cornwall. He advised them to give up their situations and join him in Birmingham, and they did so. James was made foreman of the works

where Richard was employed as clerk, and, with the help of a lathe they had constructed, Joseph took up in the same works a branch of manufacture not previously attempted there. At this time they had formed no great aspirations for themselves, but an incident which Sir Richard thus relates seems to have set them thinking:—

“Soon after my eldest brother came to Birmingham we were walking in the residential part of the town, and on passing two fine houses I told him they were owned by two men who entered Birmingham with their tools on their backs many years before, but who had succeeded by great industry and intelligence in building up a large business. On hearing this my brother said, ‘Why should not we do the same?’ I had no idea he entertained such ambitious views. The possibility had never crossed my mind, but his query set me thinking, and from that time I never lost sight of it.”

There were, however, a good many steps to be taken before these “ambitious views” could be realised, and in the meanwhile Richard kept to his clerkship for three years and a half, his salary increasing to £80 a year. Then he began business on his own account as a “merchant,” and not long after Joseph and James started as manufacturers on a small scale, Joseph, especially, being a clever designer of new

tools. At a rental of four shillings a week they engaged a portion of a manufacturer's packing room in which a revolving shaft projected, giving them the power they needed for their lathe, some brown paper over a wooden frame converting one end of the room into an "office" for Richard.

In this most modest and unpretending of workshops it was that "Tangye Brothers" began their career as manufacturers, and at the start it seemed likely enough that that career would not be of very long duration. They had thought to adapt such machinery as they possessed to the making of cordage and small ropes; but the experiments they persevered in led to nothing but failure, and the practical exhaustion of their finances brought them to the verge of despair. Then an old schoolfellow of Richard's sought their assistance in the execution of an order for large quantities of lint for use in the Russian War. They knew nothing about lint-making, but they rose to the occasion, constructed some special machinery, and were soon actively engaged in the supply of the desired lint. Other work followed, and they were able to remove to "larger premises,"—at ten shillings the week. They now provided their own power, too, with the help of an old engine and boiler which they purchased. Joseph's invention of a new hydraulic lifting jack led, soon after, to their receiv-

ing an order from Mr. Brunel to supply such jacks for the launching of the *Great Eastern*. These jacks set not only the *Great Eastern* afloat but Tangye Brothers as well, and, as it happened, the firm was to have a much more successful career than the steamer.

The brothers had now established their position in a modest way, and they found they could keep on the workman whom they had engaged for "only three months certain"; but any relaxing of their own energy was quite out of the question. While Richard was travelling through the country for orders, Joseph, James and Edward, who had now joined them, were working sixteen hours out of the twenty-four in building up the business in Birmingham. There was at that time a decided opening for improved appliances in the moving and lifting of heavy weights, and the mechanical genius of the Tangyes was especially well fitted to the supply of this want. They achieved a great success with the manufacture of differential pulley blocks; they followed up their provision of the new hydraulic jacks which floated the *Great Eastern* by making other such jacks, with the help of which one man could raise from three to sixty tons; and they also made hydraulic shearing machines which would cut bars of iron six inches square. They turned out,

in fact, machinery and mechanical appliances of all kinds and descriptions, and they even anticipated the motor-cars of to-day by constructing, in the early sixties, a road locomotive for passengers. It ran many hundreds of miles until its career was cut short by an Act of Parliament which, passed at the instigation of people of timid minds, laid down that no such locomotive should travel along a highway at a greater speed than four miles an hour, and that none should travel at all without being preceded by a man carrying a red flag!

The constantly-increasing business necessitated, of course, correspondingly enlarged premises. In 1859 the brothers had built some works of their own in Clement Street, Birmingham, but three years later they had to erect still more, covering three acres of ground, at Soho. Here the "Cornwall Works," such as they are known to-day, were fairly started, only, however, to be expanded from time to time until the ground occupied was over twenty acres in extent. At these works there will be found a large dining-hall, which is also used for concerts, lectures, temperance meetings, etc.; a dispensary and a provident sick society, science classes, a Sunday school for adults, a lending library, a savings bank, and funds for making provision against accidents, or for widows and orphans. A system prevails, too, of enabling



the workpeople to participate in the profits of the business.

Then the city of Birmingham is indebted for her splendid Art Gallery to the Tangyes, who also gave £11,000 towards the erection of a Municipal School of Art,—institutions which they regarded as essential to the advancement of the industrial classes in a great manufacturing centre such as the Metropolis of the Midlands. In these and other ways the Tangyes have sought to enable others to share in the good fortune they have won for themselves, and the honour of knighthood conferred upon Mr. Richard Tangye was a well-merited recognition of a wise and generous disposal of wealth brought together as a result of so much energy and determination.

## MR. GEORGE CADBURY AND ARTISANS' DWELLINGS

A STILL further instance of the combination of energy with business success, and of wealth with practical philanthropy, is supplied from the Midlands in the example of Mr. George Cadbury.

He was nineteen years of age when, in the fifties, in conjunction with his late brother, Richard, he took over the cocoa works which their father was then carrying on, at Birmingham, with the help of about a dozen workpeople. The father was one of the strictest of Quakers. Not only did he keep to the old Quaker garb' until his death, in 1890, at the age of eighty-eight, but he was a teetotaller for sixty years, he would not tolerate in his house so worldly an instrument as a piano, and not until he was sixty years of age would he indulge in such enervating luxury as an easy-chair. He had, too, a keen sense of the duty he owed to his fellow-men, and the performance of his various public duties in the town of Birmingham took up so much of his time and thoughts that of late years his own affairs had been very much neglected. Although, therefore,

he himself had gained plenty of money from his business in his earlier days, it was a losing concern when he made it over to his sons. It was, in fact, very doubtful if they would be able to put it on a sound basis again at all. It took ten years, as Mr. George Cadbury once said, "to turn the corner," and during those ten years he himself worked from seven in the morning until nine at night for six days a week. Nothing but hard, unremitting toil would have pulled the concern through; but Mr. George Cadbury was so little afraid of being energetic that, after all this work during the week, he was "up with the lark"—or very soon after—every Sunday to take the early morning Bible class for adults which he has carried on in Birmingham for over forty years. There were times when he feared that the energy he was devoting to the cocoa business was being thrown away, and he once thought of giving it up, and going out to India as a tea-planter. But, "forlorn hope" though it was, he stuck to it, worked away as hard as ever, turned the corner at last, and eventually the number of work-people increased from the original dozen to 3400, and the name of "Cadbury" became a household word throughout the length and breadth of the land.

Although the remarkable degree of success which has attended Mr. Cadbury's business career necessitated such close and steady devotion on his part, it

was far from absorbing his thoughts, and he is to be reckoned among the wisest and most practical of those manufacturer-philanthropists who seek to promote the well-being of the workpeople to whom they are so largely indebted for their wealth. When, in the early nineties, he began to talk about removing his works from Birmingham to Bournville—a charming country spot some five miles distant, where fields and meadows, trees and flowers, birds and bees, take the place of the buildings, the streets, the traffic, and the smoke of Birmingham—it seemed to some of Mr. Cadbury's friends that he was going to wreck a business which he had built up at the cost of so much toil and energy. But Mr. Cadbury did not think that removal to the country would injure his business, and he was quite sure it would have a good effect on his workpeople. So long as they herded together in crowded dwellings in the back streets of a great city, so long as they had no sources of recreation open to them, after a day of toil, but the streets or the public-house, how was it to be expected either that they would improve in their moral or their intellectual tone, or that they would be able to maintain a proper degree of physical strength? Remove them to healthy conditions in the country, give them comfortable dwellings with pleasant surroundings, and let every man have his patch of ground where he could devote his evenings to the cultivation

of his fruit and vegetables,—bring about such changes as these, and then there would be a better chance of seeing a physical and moral regeneration of the toilers in crowded cities.

Such was the way in which Mr. Cadbury argued, and, happily, he had the strength of his convictions. His cocoa factory was set up afresh in wooded Worcestershire, and from every point of view the transfer has been a success. Around the new works at Bournville a village of close on four hundred cottages has been brought into existence by Mr. Cadbury for the accommodation of his workpeople, though other persons employed in Birmingham have been glad to take advantage of them as well, proceeding to and from their places of business on bicycles. The cottages are built in small blocks, each block with its own quaint design, and every cottager has his garden, at the end of which are rows of plum trees, apple trees, and pear trees. Mr. Cadbury has the greatest possible faith in the value of these gardens in improving the physique of the occupants of the cottages. There are on the estate two superintendent gardeners from Kew and a number of under-gardeners, who give the tenants all needful information as to the cultivation of vegetables, fruit, and flowers, supplementing personal instruction with classes and lectures on bee-keeping, rose-culture, and various other subjects. A six-roomed cottage on

the estate can be rented for six shillings a week, and detached villas for twelve shillings and sixpence. There are two football fields, a cricket ground, an open-air swimming bath, some recreation rooms, and a youths' institute, and within easy distance there is a home for girls employed in the cocoa factory, a home of rest for Christian workers, and a convalescent home for children.

Early in 1901 the Bournville estate, with its dwellings and its 370 acres of land, were made over by Mr. Cadbury to trustees, who are to utilise the income for the purpose of setting up other such villages in different parts of the country. The amount received from the houses already constructed, and from the land not yet built upon, is about £6000 a year, and the actual monetary value of the gift to the Bournville Village Trust is estimated at £180,000. The income will increase as fresh buildings are erected, and it should increase still more rapidly as fresh estates are laid out. Mr. Cadbury estimates that in 150 years the Trust should be in receipt of a million the year, the whole of which amount is to be applied to the creation of still more "garden cities" of the same type as the one which the original founder and benefactor has set up. In this way there will, apparently, be no limit to the possible future developments, while as the estate has been placed primarily in the hands of the Charity

Commissioners there ought to be no danger of the founder's ideas not being properly carried out. At a conference of the City Garden Association held at Bournville on 21st September 1901, Mr. Cadbury said "it was a condition of the Trust that only one-thirtieth of the income should be devoted to the development of factories. They hoped to have, say, a dozen factories in the centre of the estate, worked by electricity produced by the Mond gas system, so that there would be no chimneys and no smoke to spoil the gardens."

Mr. Cadbury regards his scheme as a contribution towards the solution of that great housing problem of which so much has been heard of late years, and the eminently practical wisdom shown by him in thus disposing of the wealth he has acquired will be recognised not only by the present generation but, one may hope, in ever-increasing proportion by many generations yet to come.

## THE INVENTOR OF BESSEMER STEEL

“**S**HALL I ever be known here? Shall I ever have the pleasure of seeing a smile of recognition light up the face of any person in these ceaseless streams of unsympathetic strangers?”

Such were the words of a youth of eighteen as he stood in the streets of London one day in the year 1831, watching the throngs of people who went past him, caring no more for the stranger within their gates than they did for the sparrows that hopped about in the street. The change from the pleasant country village in Hertfordshire which the youth had just left to that wilderness of building known as London, was great in the extreme, and he might well feel within him a sinking at the heart as he stood, “a mere cipher in a vast sea of human enterprise,” and wondered whether the time would come when anybody there would know him.

Little did he foresee the day when the name of Henry Bessemer would be spread throughout the universe as that of the most conspicuous figure in the engineering world for the space of four decades! Little



could he anticipate, not merely the fortune he was to make for himself, but the revolutionary changes he was to bring about in the industrial world, and the incalculable benefits he was to confer on mankind in general, by his new process in the art of making steel!

But between these two extremes of his career there was an unknowable quantity, not merely of difficulty and struggle, but of discouragement and opposition, only to be overcome by perseverance, by an absolute self-confidence, and by an unwavering faith in the future. There are inventors and discoverers who, as in the case of Sir Josiah Mason and the steel pens, hit upon a lucky idea, secure immediate recognition, and have thenceforth to think only of developing an absolutely certain business. In the case of Sir Henry Bessemer success in the invention more especially associated with his name was only achieved after labours and disappointments which few men would have been able to endure, and if ever an instance were afforded of what can be done by putting one's whole soul into the business that lies before one, that instance will be found in the story of the inventor of Bessemer steel.

In another respect, also, his career was a remarkable one. The faculty of inventing things was, as it were, born in him; but, though he attained to a universal

fame surpassed by no engineer of his day, he had undergone no systematic scientific training, and he was not only a self-made man but a self-taught engineer. It has been said of him that if he had been carefully instructed in metallurgy, according to the accepted notions thereof, he would never have invented the Bessemer process. Had he been possessed of both the knowledge and the prejudices of an expert he would have assumed, as the other experts had done, that the thing he proposed to do was impossible. But in that "splendid audacity of ignorance" which he possessed he had more faith in his own convictions than in other people's learning; he felt sure he could do what the scientists declared he could not, and he persevered in spite of everything and everybody until he had achieved one of the greatest and most beneficent triumphs in the whole range of industrial effort.

The fact that it was a great triumph may be accepted without the proof of comparative statistics as to the world's output of steel; that it was a beneficent one could not be better shown than by quoting the following remarks from the record of Bessemer's achievements which appeared in *Engineering* just after his death:—

"Bessemer has made life more pleasant to every man, woman, or child in the civilised parts of the world. He has increased the purchase power of money,

enabling the poor to get more necessaries and the rich more luxuries than they otherwise could, and thus he has established a claim for gratitude which even the most ignorant can understand. Nearly one-third of the vast output of Bessemer steel has gone into rails, besides immense quantities into axles and tyres, not only greatly cheapening the working of railways, and so reducing the cost of everything we consume, but rendering it possible to deal with the concentration of heavy traffic with which it would simply have been impossible to cope under the old conditions. Of the destination of the remainder it is impossible to speak so definitely, but its broad effect has been to cheapen production, either directly, or by producing a better product at the old cost, or more often by enabling machine work to be substituted for hand labour. Sir Henry Bessemer reaped a large return for his invention, but his reward was a mere bagatelle compared with the actual money gain which has accrued to the general public."

The life-story of the man of whom such generous words as these could be written is one of the romances of the industrial world.

Born on 19th January 1813, at Charlton, near Hitchin, Hertfordshire, Henry Bessemer was the son of Anthony Bessemer, who was himself a remarkable man in his way. He was not "a French artist," as some

authorities have affirmed, but an Englishman, born in Old Broad Street, London, and educated in Moorfields, though he spent the greater part of his life abroad. When quite a boy he began to study mechanics in Holland, and at the age of twenty he had constructed a floating steam-engine for the purposes of land-drainage, near Haarlem. From Holland he went on to Paris, where he made improvements in the microscope, and was elected a member of the French Academy at twenty-five. He became a famous die-sinker and type-founder in Paris, was raised to the position of inventor and administrator in the Mint, and accumulated considerable means. In 1792 or thereabouts, following on the outbreak of the Revolution, he was intrusted with what, in view of the limited bread supply, was the responsible duty of controlling a State bakery. But the citizens rose in revolt against a reduction in the size of the loaf. They wrecked the bakery, and Mr. Bessemer was cast into prison. There he lay for some time. Each day he heard a number of his fellow-prisoners called out to march to the guillotine, and he expected that his own turn would come in due course. He was summoned at last, and he stepped bravely forward to meet his doom. Much to his surprise, however, he was set at liberty, and almost the first object he saw in the streets, on regaining his freedom, was the dead body of Robespierre,

whose own death on the guillotine signified that the Reign of Terror was over.

Mr. Bessemer had escaped with his life, but he lost all his means, and he returned to England penniless. He settled at Charlton, took to die-sinking once more, and was such an expert at the business that he got paid for his dies at the rate of £1 per letter. In this way he was soon prosperous again. He then hit upon the idea of making ladies' neck and other chains by forming each gold link in two embossed sections, and welding these sections together in such a way that the link appeared to be made of solid gold, while the chain itself remained comparatively light. He knew, however, that as soon as he offered any of these chains for sale, cheap imitations would be produced at Birmingham. In order, therefore, to reap the fullest advantage from his invention, he turned everything he possessed into money with which he bought up as much gold as he could, got together a large accumulation of the chains, and then put the entire stock on the market at once. He made a great profit out of the venture, and was able to purchase a considerable estate in Hertfordshire, on which he hoped to settle down for the remainder of his days.

But a further reverse of fortune came upon him, for in 1831 he sustained a heavy loss by reason of a commercial failure in Calcutta, and he sold off his estate in order to meet his liabilities.

This disaster had an important bearing on the life of his son, Henry, who, in the meantime, had been attending school at Hitchin, and acquiring studious habits, though developing, also, a great love for the use of tools and machinery, among which most of his leisure time was spent. What happened when trouble again overtook his father has been thus narrated by Sir Henry:—

“I was then eighteen years of age, and, under the impression that matters were very much worse than they really were, I felt myself to be only an encumbrance on my father’s resources. This I resolved not to bear, and, hastily obeying an irresistible impulse, I wrote a letter to my father, asking him to forgive the step I was about to take, and left my home without consulting anyone, and with only the small amount of pocket-money I happened to have in my possession. With such limited resources I determined to push my way in the world, implicitly believing that to those who are fully determined to help themselves the road to success is always open.”

It was with these ideas that Henry Bessemer arrived in London. He had not been brought up to any profession, but he had a natural gift for designing, especially patterns in arabesque and quaint fantastic forms in foliage. This faculty he proceeded to turn to account by preparing designs for Paisley shawls. Then he made models in clay, one of them being accepted

for exhibition at the Royal Academy, and he invented a means of consolidating plumbago dust into a solid block for the manufacture of lead pencils, selling the invention—which is still in use—for £200. At the age of twenty he invented a mode of rapidly reproducing embossed copies of the highest works of art, stamped on card-board, by means of dies taken from the originals with a peculiar composition he had discovered. He could make even from a thin paper original a permanent die capable of producing a thousand copies; but he believed that if his process had become known it would have opened the door to an immense amount of fraud, inasmuch as there was not a Government stamp, or the paper seal of a corporate body, that any office boy could not have forged, in the course of ten minutes, at a cost for raw materials of less than a penny. He was thus led to devise some form of stamp which could not be forged, and there was the more reason for his doing so because, as he soon afterwards found, the Stamp Office was being defrauded to the extent of £100,000 a year by the transfer of stamps from old and useless deeds to new skins of parchment. After months of study and research he invented a die which produced a stamp on the parchment by piercing it with a design representing more than four hundred holes, on the principle since so commonly employed for perforated patterns on

valentines and other ornamental papers. In this way he hoped to prevent both forgery and illegal transfer. The head of Somerset House, to whom he showed the design, was greatly pleased with the stamp, which the authorities determined to adopt. They offered Mr. Bessemer the position of Superintendent of Stamps at £600 or £800 a year, and he was the more gratified with this offer because he was then looking forward to getting married.

But suddenly the situation was changed. Calling on the young lady to whom he was engaged, he showed her the elaborate design for the new stamp, and explained its special purpose. "Yes," she replied, "I understand this; but surely if all the stamps had a date put upon them they could not be used again without detection?" Mr. Bessemer was not a little startled by this new idea, and though, at first, he thought it impracticable, as the steel dies could have only one date engraved upon them, he afterwards thought that holes could be drilled into the dies for the insertion of movable figures. "I clearly saw," he wrote, "that the plan would be most simple and efficient, and would take less time to inaugurate than the more elaborate plan I had devised; but I must confess that, while I felt pleased and proud at the clever and simple suggestion of the young lady, I saw also that all my elaborate system of piercing dies, the



result of months of study, and the toil of many a weary and lonely night, was shattered to pieces by it."

Somerset House, on being shown the new plan, adopted it in preference to the other, especially as all the old dies, old presses, and old workmen could be employed. In fact, Somerset House found no necessity now to give Mr. Bessemer the promised appointment, and though an Act of Parliament was passed authorising the use of the new stamps, he himself received no reward whatever. "In all the trustfulness of youthful inexperience" he had shown the Stamp Office a plan so simple that it could be put into operation without his help.

"I had no patent to fall back upon. I could not go to law, even if I wished to do so, for I was reminded, when I was pressing for mere money out of pocket, that I had done all the work voluntarily, and of my own accord. Wearied and disgusted, I at last ceased to waste time in calling at the Stamp Office, for time was precious to me in those days, and I felt that nothing but increased exertions could make up for the loss of some nine months of toil and expenditure. Thus, sad and dispirited, and with a burning sense of injustice overpowering all other feelings, I went my way from the Stamp Office, too proud to ask as a favour that which was indubitably my just right."

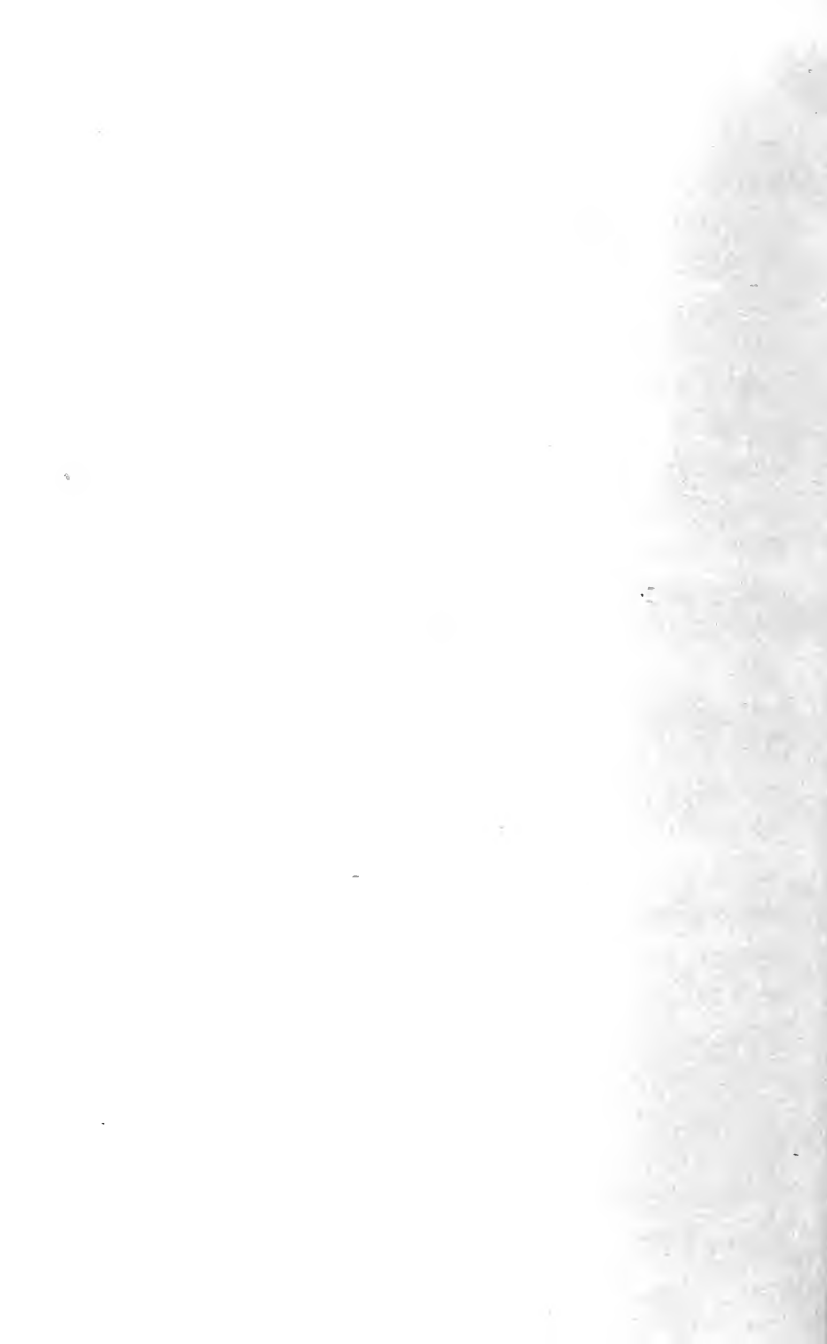
Somerset House saved millions of money by adopting the new process, but it was not until forty-five years had elapsed that any acknowledgment was made to the inventor. Then, in 1876, on the British Government refusing him permission to wear the Grand Cross of the Legion of Honour, awarded to him by the French Government in recognition of the value of his new process of steel manufacture, he wrote to *The Times* a letter from which the above extracts are taken, recounting, as an illustration of "The Reward of Invention," the way in which the Government of his own country inflicted on him "a great and grievous injustice in return for a great and permanent benefit" conferred by him on the State. Soon after this he received the honour of knighthood,—mainly in recognition of services rendered nearly half a century previously!

For the time being, however, Mr. Bessemer had a distinct check, and, though he nursed his wrath against the British Government, keeping it warm until the time should come for him to speak his mind on the subject, he speedily took up other plans. He made a machine for embossing velvet, producing such good results that some of his handiwork was purchased for Windsor Castle; and he invented, in 1838, a machine which allowed of type being cast in a vacuum, thus obtaining freedom from air-holes.

But much more important than either of these was



SIR HENRY BESSEMER.



his invention of an apparatus for the manufacture of bronze powder for use in painting or decoration. This apparatus was the most profitable of all his minor inventions, for it was to lay the foundation of his fortune, and provide him with the means by which he could carry on his costly experiments in the manufacture of steel.

The "turning-point" represented by this manufacture of bronze powder was the result of one of those small incidents in life which so often lead to great results for those who know how to take advantage of them.

Mr. Bessemer's sister had received for a Christmas present an illuminated gift-book in which there were initial gold or gilt letters, and she asked him to obtain some gold paint for her, so that she could illuminate the rest of the book. He inquired about the cost of gold paint, and found that only a very small quantity was sold for half a crown. As half-crowns were none too plentiful in those days, he wondered whether he could not himself make gold paint, and with characteristic energy he turned his attention to the subject. He soon found, too, that there was the possibility of a good business in the making of such paint, for while it was imported from Nuremberg at £5 or £6 the pound, the cost of the raw materials could not be more than elevenpence the pound. Obtaining some Dutch metal

“gold” foil he ground it to a very fine powder, mixed it with a little honey, and then treated it with varnish. He produced gold paint by these means, but it was devoid of “shine,” and without shine gold paint was of no value. He knew that he had got the right materials, but it was evident that he had not got the right way of preparing them. On examining the German gold paint through a microscope he discovered that it had not been ground down into a powder—the method which he had adopted—but broken up into minute flakes, and it was evident that he must invent some machinery which would enable him to secure the same results. Month after month he devoted to the task, but he had to carry on his investigations in absolute secrecy, lest someone might get an idea of what he was doing, and anticipate him. For the same reason he had different parts of the requisite machinery made by different persons, fitting them together in his own house. The machinery was a success, but he never patented the process. He preferred to keep his own secret and to carry on the manufacture at night in a room of his dwelling to which no one but his wife (for by this time he had married) and two or three of her relations, who helped in the work, and could be thoroughly depended on, were admitted. It is said that even his eldest son was twenty-one years old before he was intrusted with the secret. One cannot

wonder, however, at his reluctance to run the risk of having his invention pirated, for, though he could sell the gold or bronze powder far cheaper than the German article, his profits were at first 1000 per cent., and for many years they were several hundred per cent.

No sooner had the bronze-powder business been successfully established than Mr. Bessemer was ready to turn his attention to something else. For a time he was occupied with paints, oils, and varnishes in general; then he worked out some experiments in railway carriage construction, and next he invented an improved centrifugal pump, a sugar separator, and a plate-glass polishing machine.

With the outbreak of the Russian War in 1854 the inventive skill for which, by this time, Mr. Bessemer had become famous, took an entirely different direction. There was an opening for improved ordnance and projectiles, and he had made a succession of experiments with the idea of discovering a mode of firing elongated projectiles from a smooth-bore gun, the rotation necessary to ensure their proper position during flight being obtained without rifling the gun. In this way he hoped to render all smooth-bore guns at once available for firing elongated shot and shell. He put his proposal before the British Government, but they refused even to consider it. Then, by chance, he had the opportunity of discuss-

ing his ideas with Napoleon III., who not only encouraged him to persevere, but gave him every facility for carrying on the experiments at Vincennes, and authorised him to draw on Messrs. Baring Brothers for as much money as he might require.

In the course of these further experiments the French commander under whose supervision they were being carried out at Vincennes remarked to Mr. Bessemer, "The shots rotate properly, but if we cannot get something stronger for our guns, these heavy projectiles will be of very little service."

This casual remark proved to be the first link in the long chain of ideas that eventually led to the invention of Bessemer steel. Its immediate effect was to cause Mr. Bessemer to return to London with the conviction that an improvement in the quality of iron for guns was a subject well worth investigating. It was one, however, on which he then had little or no practical knowledge. He had had the training neither of a metallurgist nor of a chemist. He knew something of science, but, at that time, very little of engineering. That he should want to develop all at once into an iron manufacturer might seem a presumptuous aspiration.

But no obstacle of any kind whatever could keep "the ingenious Mr. Bessemer," as he was called, from following up an idea that had once taken possession



of him. He began to get up the whole subject of iron metallurgy. He first mastered all that he could learn from books, and then he secured a good foundation of practical knowledge by visiting various iron foundries. With the money coming to him from his business in bronze paint he built some experimental works at St. Pancras, and there he carried on one series of investigations after another, sparing neither toil nor money; but for a long time the only result was failure after failure. At the end of a year or so he had so far succeeded in his attempt to refine cast-iron that he produced a small model gun of metal which represented the best cast-iron then available for artillery purposes. He took the model to Paris, where he met with no lack of appreciation from the Emperor, though it was still of no use for him to look for appreciation from the Government at home.

By this time he had become convinced that the refinement of iron in the fluid state might go on until pure malleable iron or steel would be obtained. He persevered in his experiments, pulling down and rebuilding one furnace after another, constantly setting up new and improved machinery, and taking out patent after patent until the demand on his financial resources became so great that it looked as if even his splendid profits from bronze paint might not be equal to the strain.

One day, in 1856, he found, quite by accident, that atmospheric air alone was capable of wholly decarbonising grey pig-iron, and converting it into malleable iron, without puddling or other manipulation. "It was this," he wrote, "which gave a new direction to my thoughts, and after due consideration I became convinced that if air could be brought into contact with a sufficiently expansive surface of molten crude iron, the latter could rapidly be converted into malleable iron."

He now diverted all his thoughts in this direction. He first produced some ten or twelve pounds of malleable iron by blowing air with a portable blow-pipe into some molten cast-iron placed in a crucible, and, having proved that the principle of purifying pig-iron by atmospheric air was a sound one, he took out a patent for the process of reducing the metal in a crucible with an air blast. Then he invented a large egg-shaped vessel to take the place of the crucible, the air blast being supplied by a small blowing-engine. Good steel was produced, and another patent followed. Mr. Bessemer then invited Mr. (afterwards Sir) George Rennie to see the experiments, and at the suggestion of that gentleman, who was greatly astonished at what he saw, he undertook to read a paper at the meeting of the British Association, at Cheltenham, on "The Manu-

facture of Malleable Iron and Steel without Fuel." The paper was read on 11th August 1856, and made a great sensation, though the authorities of the British Association did not give any account of it in their official report of the meeting. So alive, however, were the manufacturers at that time to the revolutionary changes which his process seemed likely to bring about, that within a month Mr. Bessemer received £27,000 from firms who desired to insure against a possible monopoly. But only another month later the ironmasters of Staffordshire and Worcestershire, who had been using phosphoretic British ores not suitable for the process as then carried on, formally condemned it as a failure, and it was true enough that most of the experiments made in the country had not been successful. Ironmasters and press now joined together "in one general chorus of condemnation of what they then believed to be a perfect chimera, which none but a wild enthusiast could have ever believed to be possible." One newspaper spoke of the invention as "a brilliant meteor that has flitted across the metallurgical horizon, dazzling a few enthusiasts, and then vanishing for ever in total darkness."

Mr. Bessemer did not care to discuss the matter with his critics, but he was none the less certain that good steel could be produced by his process, and he

set to work to discover why it was that others had failed where he had succeeded. All the old experiments had to be gone over again, a laboratory was fitted up, and the services of a professor of chemistry were engaged at a high salary. Heavy expenses had to be incurred afresh, while there could be "no slackening of exertion, no cessation of the severe mental and bodily labour." A long and weary year was spent "amid a constant succession of newly-formed hopes and crushing defeats, varied with occasional evidences of improvement." Week followed week, and six months more of anxious toil glided away, leaving Mr. Bessemer much worn by hard work and mental anxiety.

"The large fortune that was almost within my grasp seemed now far off; my name as an engineer and inventor had suffered much by the defeat of my plans; those who had most feared the change with which my invention had threatened their long-vested interests felt perfectly reassured, and could now safely sneer at my unavailing efforts; and, what was far worse, my best friends tried, first by gentle hints, and then by stronger arguments, to make me desist from a pursuit that all the world had proclaimed to be utterly impossible. It was indeed a hard struggle, and I had well-nigh learned to distrust myself, and was fain at times to surrender my own convictions to the mere opinion

of others. Those most near and dear to me grieved over my obstinate persistence ; but what else could I do ? I had had the most irrefragable evidence of the absolute truth and soundness of the principle on which my invention was based, and with this knowledge I could not persuade myself to fling away the promise of wealth and fame, and lose entirely the results of years of labour and mental anxiety, and at the same time confess myself beaten and defeated. Happily for me the end was nigh, and in a few more months I had fully succeeded in producing steel worth £50 to £60 per ton from charcoal pig-iron which had cost me only £7 per ton, the conversion of the crude iron into steel being effected by simply forcing minute streams of cold atmospheric air upwards through it for a space of fifteen minutes !”

But a world which two years before had dismissed his project as a failure was not inclined to change its views when he now proclaimed a success. Not a single ironmaster or steel manufacturer in Great Britain could be induced to adopt the process. By arrangement with his friends, Messrs. Galloway, engineers, of Manchester, some of his steel was given to their workmen, and, though they used it for two months, they had no suspicion that it was other than steel of the best quality, costing £60 per ton. The success was, therefore, certain enough, but Mr. Bessemer was

reduced to the expedient of erecting works of his own at Sheffield, in combination with his partner, Mr. Longsdon, his brother-in-law, Mr. Allen, and the Messrs. Galloway. The Sheffield steel-makers soon found that the new-comers were underselling them by from £10 to £15 per ton, while the Bessemer works answered so well that when, at the end of fourteen years, the firm was dissolved, the place was sold for exactly twenty-four times the amount of the whole subscribed capital, notwithstanding that the partners had already divided in profits a sum equal to fifty-seven times the gross capital. In royalties from the manufacture of steel under his various patents Sir Henry Bessemer received during his life over £1,000,000.

Of the enormous expansion that the manufacture of Bessemer steel has undergone throughout the world, and of the extent to which it has taken the place of iron, there is no need to speak in detail here. More fortunate than most inventors, Sir Henry Bessemer, the unknown youth of the thirties, who had wondered if he would ever see a smile of recognition on the face of anyone in London, lived to find himself famous throughout the world, to reap a rich pecuniary reward for his inventions, and to have abundant honours conferred upon him. In the later years of his life, spent in his beautiful house on Denmark Hill, and there brought to a close on 15th March 1898, he devoted

himself to further experiments, which, with the study of various problems of life and science, and the creation of a variety of wonderful things in the grounds of his house (including the reproduction, underneath a mass of imitation stratified rocks, of a court of the Alhambra, in Spain, modelled after that in the Crystal Palace; a fernery where an arrangement of mirrors gives one the impression of endless vistas of rocks and ferns; and an elaborate observatory where, to prevent any possible warping of the panels, they are made of plate-glass, painted over so as to resemble wood), constituted the chief though decidedly costly recreations of an ever-active mind. His later inventions did not attain to any degree of public utility, and some of them—notably his suspended steamship-saloon, for the prevention of sea-sickness—were a distinct failure, while his great telescope remained unfinished. But a man who had given to the world the Bessemer process of making steel could well afford to depend on that for his laurels.

## A MODERN MAGICIAN

**T**HOMAS ALVA EDISON represents the highest type of that inventive genius and that intense nervous energy which have done so much to make the American people what they are, and to give them so prominent a position among the nations of the world. It is difficult to imagine that any other country than the United States could have given him birth. Great Britain has had inventors, discoverers, and scientists of whom she may well feel proud; yet even Great Britain has never produced an Edison, or anyone else who, as an all-round practical scientist, can exactly compare with him. He is one of those remarkable creations, standing head and shoulders above the rest of mankind, and possessed of an exceptional degree of intellectual and creative force, in which Dame Nature indulges at rare intervals; but even Dame Nature would hardly have ventured to place him elsewhere than in the particular land of which he is a citizen.

Mr. Edison must be regarded as the outcome of conditions peculiar alike to the nineteenth century and to the American continent. Not only, too, is he the



result of the spirit of his times and of his country, but he concentrates, to a certain extent, that spirit in himself, to give it out afresh in ever-increasing circles, inspiring and stimulating others, and exercising so much influence on the thoughts and aspirations of his fellow-countrymen that the creative skill and the mental conditions of the whole people, more or less, are advanced thereby. A land that can produce an Edison has no need to fear as to its future. And yet there is no cause for envy on the part of other lands. American though he be, Thomas Edison is an international benefaction. He grows, as it were, on the soil that suits him best; but the whole world benefits from the fruits of his labours, and no one would wish to see him transplanted.

To present a genius of the type of Edison as an object of emulation for the young scientist may seem almost like offering Shakespeare as an example for the literary aspirant, Beethoven for the would-be musician, and Raphael for the student in art. Yet the story of his life would suggest that, however great his natural gifts may be, a fundamental reason for the success of "the Magician of Menlo Park" is to be found in his sheer hard work. It is scarcely possible to suppose that human being ever worked harder than Thomas Edison. "Till 1888," he recently said, "I used to work twenty hours a day. Now I am getting older,

and I don't have the sap that I used to have, so I can only work about sixteen hours a day." But even twenty hours at a stretch have not always represented the full extent of the strain he has imposed on his energies. On occasions when he has had a particularly difficult piece of work on hand he has worked at it night and day until he has completed the task. Once when he had received a large order for his electrical machines for printing gold and stock quotations he found that the machines, when made, would not work. Accompanied by some of his assistants he took the machines to a room on the top floor of his factory, turned the key in the door, put it in his pocket, and then said, "Now, you fellows, I have locked the door, and you will have to stay here until this job is finished." And stay they all did, with no sleep and very little food, for sixty hours, until the defect in the machines had been discovered and remedied. Then Mr. Edison slept for thirty-six hours, and woke up feeling quite fresh. Even in ordinary circumstances—up to the time of his first marriage, at least—he had no "regular habits" in regard either to sleep or meals. Sometimes he did not take off his clothes for a week. He would lie down on a bench and sleep for half an hour at one time, and for an hour at another, just as he could get the opportunity, and then go on with his work again. Even his assistants had no fixed hours. One of his

tests for a new-comer has been to give him a task that would keep him going all night. If he looked fresh in the morning he would do. If he looked tired and worn out he was told he would not suit. The men wanted were men who could be depended on in time of pressure or emergency. Yet such is the fascination of Edison and of the labours in which he engages that even when his helpers have been sent off for the day they have returned in the evening, or at night, if they have known that some experiments were proceeding on which their employer may have set his heart. One night, however, they played him a trick which, as it happened, no one laughed at more heartily than he did himself. While he was having a short sleep in the factory they put on the hands of the clocks, so that when he awoke he thought it was four in the morning. He sent the men away at once, and then started off home himself,—to find, when he reached the street, that the people were just coming out from the theatres, and that it was only eleven, instead of four.

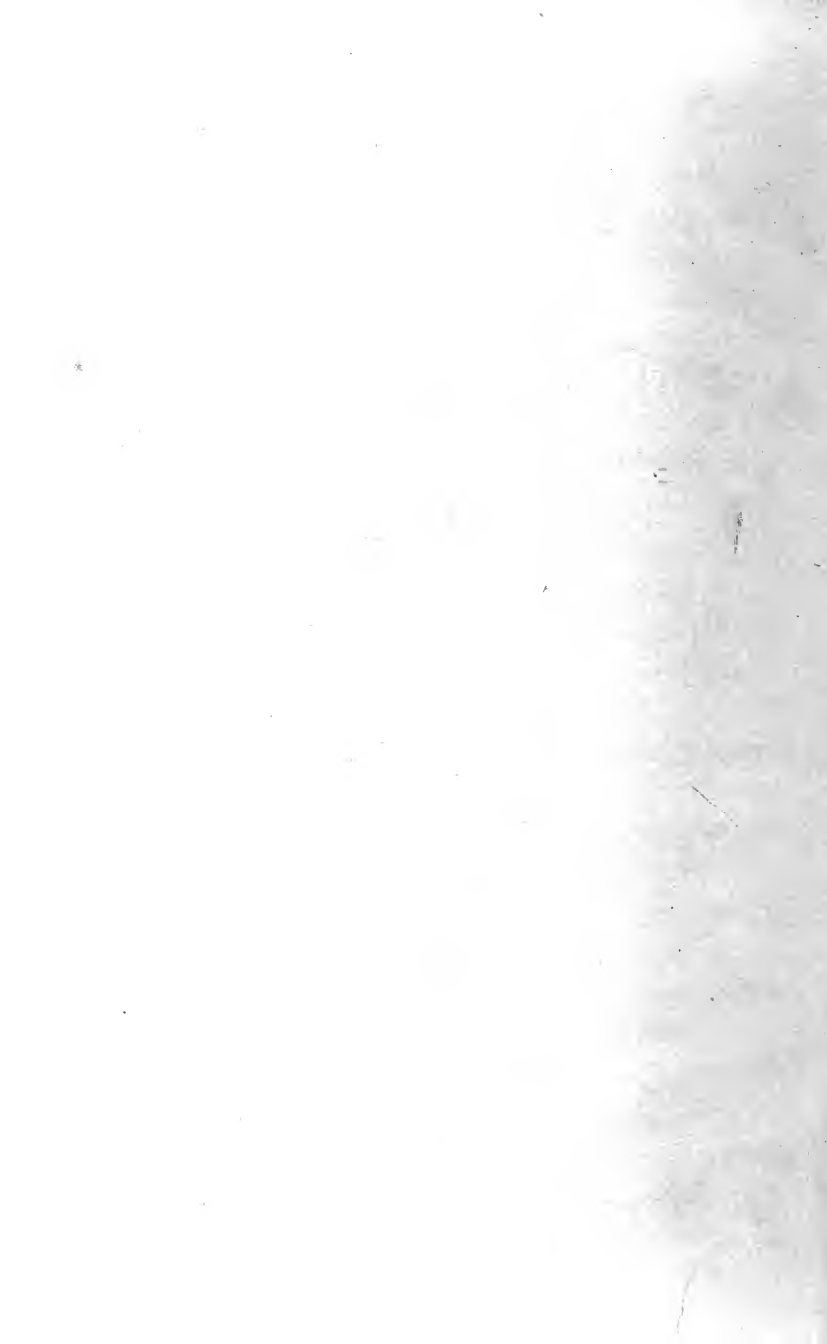
Then, too, when Mr. Edison was carrying on his electric light experiments—the chief aim of which was the construction of a suitable carbon filament for incandescent lamps—he propounded to himself 3000 different theories, each of which seemed reasonable and likely to be true, though in only two cases did the actual experiments prove the truth of the theory.

While carrying on these experiments, he remembered a passage in Humboldt describing a certain sort of bamboo which grew on the banks of the Amazon. As this bamboo seemed likely to possess the qualities he desired for the filament, he sent agents all over the world to seek for it. One of them searched the Amazon for 2300 miles, tasting no meat for 116 days, and not changing his clothes for 96, running many actual dangers besides. Ceylon, India, Japan, and other countries were also explored, a bamboo that answered the desired purpose being eventually found in Japan. In 1877 Mr. Edison and one of his assistants worked continuously, day and night, from 16th October to 21st October, in their efforts to construct the filament, and not until he had obtained a success would Mr. Edison go to bed. When, also, he was engaged on the phonograph he spent fifteen or twenty hours a day for about eighteen months trying to make the machine repeat the letter "s" in the word "Spezia."

These illustrations will suggest that Mr. Edison's inventions and discoveries have been due less to sudden inspiration than to the combination with his innate genius of a degree of patience, industry, and thoroughness almost without example. Thus far, then, at least, he may be regarded as a model for the emulation even of the humblest of students in the world of science,—the more so, perhaps, because Mr. Edison himself could



THOMAS ALVA EDISON.



hardly have begun life in much humbler circumstances than those in which his early days were spent.

His father — descended from a family of Dutch millers which emigrated from Amsterdam to America about 1737 — was a combination of nurseryman, dealer in grain, lumber and farm lands, and general produce merchant, and lived at Milan, Erie County, Ohio, where Thomas Edison was born on 11th February 1847. Even as a child the future inventor must have been of a reflective and ingenious turn of mind, as shown by a story told on the authority of his only sister. He had not yet reached his sixth year when he became very much interested in a goose that was sitting on some eggs. He was still more interested when he saw the goslings appear. He wanted to know the why and the wherefore, and was told that they were hatched because of the heat from the goose's body. A day or two afterwards he was missed, and on search being made it was found that he had collected a number of eggs, and was sitting on them in the barn, with the idea of hatching them himself!

When Thomas was seven years old the family removed to Port Huron, Michigan. With the exception of two months' schooling, the lad's education was entirely superintended by his mother, who was devoted to him and not only taught him well, but implanted in him a great love of learning, as shown by

the fact that before he was ten he had read through Hume's *History of England*, the *Penny Encyclopædia*, Ure's *Dictionary of the Sciences*, and other books of the same class. But the circumstances of the family made it necessary that he should start early to earn his own living, and he became a train boy on the Grand Trunk Railway between Port Huron and Detroit, selling newspapers, figs, etc., not only in the train, passing from one carriage to another, but also at the stations *en route*. A portrait taken of him at this period shows as bright and cheerful a lad as one could wish to see.

As the demand for his papers depended on whether or not there was special news in them, and as he had no chance of going through their contents himself before beginning to sell, he arranged with a compositor on the *Detroit Free Press* to let him see a proof of the headlines of any matter of great importance. One day in 1862 he learned in this way that the paper had got information of the two days' battle of Shiloh, the losses being put at between 50,000 and 60,000. Here was an opportunity for a great *coup*. He induced a friendly telegraph operator to send a message to the principal stations on the line, asking the stationmaster to write in chalk on the notice-board news of the battle and the heavy slaughter, and he followed by train with 1500 copies of the paper which he had obtained on credit. He found the stations crowded with people waiting



for him, and ready to buy his papers at double or even fourfold their ordinary price. This incident gave him his first lesson in the value of the electric telegraph, since the demand for his papers had been due solely to the messages sent in advance.

Later on he bought some old type, got the use of a spare smoking-room in the cars, and there produced a newspaper of his own, called the *Grand Trunk Herald*, printing it by putting the damp sheets of paper on the type, and pressing them down with his hands. His paper was regarded as a curiosity, and soon attained a circulation of 400 copies. Then he became interested in electrical experiments, and carried these on in the train as well as the printing; but the accidental breaking of a bottle of phosphorus set the car on fire, and the indignant conductor put Edison and all his belongings on the platform at the next station, and there left him. He made his way home, and was allowed by his mother to carry on his experiments in the cellar. With another boy, named James Ward, he laid a telegraph line from the cellar to Ward's house, a little distance away; but it was, of course, necessary to have an electric current as well. They had heard that electricity could be produced from cats, and so the ingenious lads obtained two cats, fastened wires to their feet, and then rubbed their backs, in the hope that the electricity resulting therefrom would work the line.

Naturally, it did nothing of the kind, and they had to resort to the more practical method of putting their money together and buying some old batteries and telegraph instruments, which gave them the desired results.

All this time Edison kept on working as a train boy, allowing his mother a dollar each night out of his earnings. One day, at Mount Clemens, he had the good fortune to save the life of the stationmaster's little son, who had wandered on the line and was in danger of being run over by a passing train; and the stationmaster, to show his gratitude, taught him all he knew about telegraphy. With further instruction he obtained elsewhere, Edison soon became qualified to take a post as telegraphist. At sixteen he obtained an appointment at Stratford, Canada, where he distinguished himself first by inventing a mechanical arrangement which—leaving him free to go out or to doze—would send by itself the regulation message to headquarters every half-hour during the night, intended to show that the operator was still in the office, and awake; and then, by neglecting to obey in time a signal to stop a train, so nearly causing a collision. To escape the consequences of the latter neglect of duty he returned to America with all possible speed. Back at Port Huron, he found that the blocks of ice had broken the cable between that place and Sarnia. He soon re-established communication (pending

the repairs) by jumping on a locomotive, and causing the steam whistle to give short and long shrieks to represent telegraphic dots and dashes, the messages he thus sent being responded to from the other side. He obtained various appointments, but his love of joking got him into frequent trouble, while the jealousy of his superiors, when they found he knew more about telegraphy than they did themselves, caused him to lose several situations. Discharged from this cause at Memphis, Tennessee, he found himself absolutely penniless, for all his money had been either sent to his mother or spent on books and instruments, and he was in bad health besides; but he started on a walk of a hundred miles, obtaining a free ride for the remainder of the journey home.

After filling various other appointments, in which he showed that he had attained to the first rank among telegraph operators, he went to Boston. There he devoted every moment of his spare time to studying electricity, his rooms becoming a combined workshop, laboratory, and library. From Boston he went on, in 1869, to New York, taking with him an invention by which he proposed to send either two or four messages at the same time over a single wire. He arrived in New York with his pockets empty, owing between 200 and 300 dollars, and with no one to befriend him. For three weeks he walked about looking

in vain for employment, though the new system of telegraphy he had brought with him was one by which, when eventually perfected, telegraph companies were to save millions of pounds. Then one day he stood in front of the offices of the Laws' Gold Reporting Company, where, at a critical moment in the financial world, the electrical apparatus which supplied quotations to 600 brokers had collapsed, causing great trouble and distress. He went inside—the shabbiest-looking person in a great crowd of excited people—examined the apparatus, and not only told where the fault lay, but remedied it. Next day the company engaged him to take charge of the whole of the machinery in their extensive establishment at a salary of 300 dollars (£60) a month; and before long he had invented some improved telegraph-printing appliances for which, much to his surprise, another company paid him 40,000 dollars (£8000).

So the moment which had seemed to be the darkest of all became the turning-point in his career. He spent nearly the whole of the 40,000 dollars in fitting up a workshop, where he brought together machinery and appliances of all sorts, but connected mostly with telegraphy, and he was soon turning out a variety of telegraphic inventions. When he was still only twenty-four he was described by the United States Patent Commissioner as “a young man who kept the path to

the Patent Office hot with his footsteps." To get away from the crowds of visitors who began to throng his factory he removed to Menlo Park, twenty-four miles from New York, setting up there a larger establishment, and gathering around him a body of most capable assistants. Subsequently, he set up a still larger laboratory at Orange, New Jersey. There, among other features, will be found a library of over 40,000 works of reference in regard to every phrase of science.

To give here even a list—apart from any detailed description—of Mr. Edison's many inventions would go beyond the objects and the available space of the present work. A very brief reference to a few of them must suffice. His method of sending four separate messages, two in each direction, over the same telegraph wire at the same moment, was completed in 1874, and was followed by his device for telegraphing from a moving train. His megaphone, for bringing distant sounds within hearing without the use of wires, and his ærophone, for greatly increasing the tones of ordinary speech, have not been brought much into practical use; but his numerous improvements in the telephone, which had been already invented by Professor Alexander Bell, enormously increased its utility, converting it into the valuable instrument it has proved to be. The principle of the phonograph was discovered by Mr. Edison in 1878, quite by

accident. He was experimenting with the telephone when he noticed that the vibration of the voice sent the fine steel point into his finger. This led him to project an instrument which would reproduce the human voice. When he showed the plan to his assistants they laughed at him. Accustomed though they were to the boldness of his schemes, they thought the magician was going too far with this latest idea. But they found he was right, although it was not until after years of the most patient labour that the phonograph as in use to-day was finally evolved. Mr. Edison's improvements in electric lighting required, as already shown, immense toil and research; but by 1891 more than 1,300,000 of his incandescent lamps were in use. Mention may be made, too, of his micro-tasimeter, a delicate instrument for measuring inappreciable degrees of heat; his odorscope, which measures odours inappreciable to the human senses; his electric pen and his mimeograph, for reproducing many copies of written or type-written manuscripts; his electric railroad at Menlo Park; his kinetograph, a system of instantaneous photography, by which 2760 photographs can be taken in a minute, all the motions of life being reproduced; and lastly, if not most important of all, his ore-extracting process, by which he expects to revolutionise the iron industry of the world. The examples will serve to show the varied

phases of Mr. Edison's genius, while, as he is known to have his head still full of ideas, it is impossible to say what further undreamed-of wonders he may not even yet have in store for us.

Mr. Edison finds his recreation in work, and one of the greatest trials that could be inflicted on him would be to compel him to go away on a "holiday." He even declares that he never takes any exercise; but the fact of his walking equal to ten or twenty miles about his works in the course of a day may be regarded as exercise enough. He eats the plainest of food, and scarcely ever drinks intoxicants, holding as he does that "a man who wants to keep his head clear ought to leave alcohol alone." Finally, scientist though he is, he not only believes in "an intelligent Creator and personal God," but has declared, "The existence of such a God can, to my mind, almost be proved from chemistry." In conversation with one of his biographers he once said:

"I tell you that no person can be brought into close contact with the mysteries of Nature, or make a study of chemistry, without being convinced that behind it all there is a supreme intelligence. I am convinced of that, and I think that I could—and perhaps I may, some time—demonstrate the existence of such intelligence through the operation of those mysterious laws with the certainty of a demonstration in mathematics."

## THE FOUNDER OF MECHANICS' INSTITUTES

**I**N a short street turning out of Chancery Lane, E.C., there is, in most active operation at the present day, an institution whose records comprise the history of that great movement for bringing scientific knowledge to the level of the ordinary artisan which in later years has undergone such multifarious and world-wide development. Known as the Birkbeck Literary and Scientific Institution, and conducted now on lines much broader than those laid down at the outset, it was originally established in 1823 as the London Mechanics' Institution, and was the actual forerunner of all the mechanics' institutes or institutions, polytechnics, technical colleges, working men's social clubs, athenæums, evening classes, lyceums, and other such educational or social organisations that have been established in such almost bewildering profusion. It is true that various efforts, local in their operation or transient in their character, had been made before, and notably one at Glasgow, to which reference will be made later on; but it was the original London



Mechanics' Institution which, by initiating a widespread public interest in the opening up of scientific knowledge to working men, so as to enable them to acquire a correct knowledge of the principles of their respective trades, set in active motion a movement that led to a complete revolution in the educational, industrial, and social conditions of the artisan and middle classes.

The pioneer of this movement, and its most active supporter and organiser for a period of forty years, was the man whose name the institution in Breems Buildings now bears. To most people the name "Birkbeck" is but a name, and recalls no idea of the person who bore it. The good work he did in the early years of the nineteenth century remains one of the most powerful social forces at the opening of the twentieth; but the world has so many other matters to think of, and so many fresh claimants to its attention keep coming forward, that the pioneers even of the living forces of to-day are apt to be forgotten. The new generation that has arisen mostly accepts the title "Birkbeck" without stopping to ask the why and the wherefore, and certainly without having any idea that the individual from whose name it was derived was so remarkable a man, and had a life-story so full of interest, and so rich in great results, as was actually the case. No excuse, therefore, need be offered for

giving here a short sketch of one who well deserves to be held in lasting remembrance by a world which was made so much the better for his having lived in it.

Born at Settle, in the West Riding of Yorkshire, in 1776, George Birkbeck was the son of a banker and merchant at that place. He early showed a great taste for mechanical and scientific pursuits. Later on he studied medicine, graduated as Doctor of Medicine in the University of Edinburgh in 1799, and in the same year was appointed Professor of Natural Philosophy in the Andersonian Institution at Glasgow. Desiring to give some lectures there on natural and experimental philosophy and the more interesting parts of chemistry, he found it necessary to obtain some special apparatus, what he particularly needed being a model of a centrifugal pump. As this was to be constructed mostly of tin-plate he went to the workshop of a tin-smith in Glasgow, Drew by name, to have it made. Neither Drew nor his men knew anything about science (there was then only one maker of mathematical instruments in Glasgow, and he was untrustworthy), and as Dr. Birkbeck explained to them the purpose and working of the apparatus he wanted they became much interested. Their interest increased as difficulties arose in getting the model to act properly, and Dr. Birkbeck was much struck by the eagerness with which they watched everything and

listened to everything. The idea then occurred to him that it would be an excellent thing to give to artisans such an insight into science as would enable them to become more intelligent and more capable workmen. Thus it was that in the tin-smith's workshop in Glasgow, in the year 1800, there came into the mind of the young Professor of Natural Philosophy the original seed of the great movement which, germinating first in that city, and transplanted in 1823 to London, was eventually to spread not only throughout the United Kingdom but the whole world.

The first step taken by Dr. Birkbeck was to ask the consent of the trustees of the Andersonian Institution for the admission to his lectures there of a certain number of intelligent working men; but the trustees regarded him merely in the light of an amiable enthusiast. They declared that, if invited, the working men would not attend, if they did attend they would not listen, and if they did listen they would not understand. All the same Dr. Birkbeck was anxious to make the experiment. He arranged a special course of lectures, and he sent out tickets of admission, which he printed with his own hand, and also a circular letter, in the course of which he said:

“In the prosecution of the design I shall deliver a series of lectures upon the Mechanical Affections of Solid and Fluid Bodies, abounding with experiments,

and conducted with the greatest simplicity of expression and familiarity of illustration, solely for persons engaged in the practical exercise of the mechanical arts. . . . I have no hesitation in predicting that vast benefit will accrue to the community by every successful endeavour to diffuse the substance of great works which cannot be perused by the people at large, thereby making them reach the shop and the hamlet, and converting them from unproductive splendour to useful though unobserved activity."

The 75 artisans who attended the first lecture of the series gave so favourable a report to their fellow-workmen that the attendance rose to 200 at the second lecture, to 300 at the third, and to 500 at the fifth, until at last the room would not hold all who wanted to come. Other courses of lectures followed, and the mechanics voluntarily arranged to pay a subscription, first of a shilling, and then of half a crown each towards the expenses.

Much to the regret of the Glasgow artisans, Dr. Birkbeck left that city in 1804 to set up practice in London as a physician; but the lectures were continued by his successor, a library was organised in 1808, and eventually, in July 1823, the mechanics withdrew from the Andersonian Institution, and formed a Glasgow Mechanics' Institution as a separate and independent body, with Dr. Birkbeck as patron.

In an address which they had presented to him they said: "It was your distinguished lot to lay open more widely than had been previously contemplated the portals of philosophy, and to invite artisans of every description to enter them, however scanty their means or obscure their condition."

Meanwhile it had become the aspiration of Dr. Birkbeck's life to obtain for the artisans of London the same advantages as had been secured by those of Glasgow, especially in the way of scientific teaching in matters affecting the industries in which they were engaged. He was one of the original founders of the London Institution (Finsbury Circus), which was established in 1809 for the diffusion of science, literature, and the arts; and during the thirty years he remained connected with it he delivered to its members courses of lectures on a great variety of scientific and other subjects. Then, just about the time that the Glasgow artisans were forming their independent institution, Dr. Birkbeck was preparing an essay with the view of advocating a definite scheme for promoting the scientific education of the working classes in London. But before his essay was ready there appeared in a weekly periodical, called the *Mechanics' Magazine*, an article which described the work he had done in Glasgow, and the developments that had followed thereon, and invited correspondence on the

subject of forming a London Mechanics' Institution. Dr. Birkbeck wrote supporting the idea, and on 11th November 1823 he presided over a great meeting of artisans at which the subject was discussed. The formation of an institution on the Glasgow model was decided on, a provisional committee was appointed, and Dr. Birkbeck was chosen as president and also as one of the trustees, the other being Mr. Henry (afterwards Lord) Brougham, who became one of the most active supporters of the whole movement.

The first meeting of the London Mechanics' Institution was held on 20th February 1824, in a chapel in Monkswell Street, London Wall, and Dr. Birkbeck gave the opening address. Lectures were begun in the chapel, the use of which was obtained on favourable terms, and a scheme was started for providing the Institution with a permanent home. But an appeal for funds did not bring in more than £2000, and the proposal could only be carried out when Dr. Birkbeck himself advanced £3700, at four per cent. interest, to meet the cost of erecting for the Institution the first home of its own, in Southampton Buildings, Chancery Lane.

There were, however, much more than merely pecuniary troubles to be met. Not only did the conductors of the *Mechanics' Magazine*, singularly enough, take up an unfriendly attitude,—apparently

from feelings of jealousy towards Dr. Birkbeck,—but the most startling forebodings were indulged in as to the consequences of giving scientific knowledge to working men. The *St. James' Chronicle*, for instance, in May 1825 published the following alarmist effusion:—

“A scheme more completely adapted for the destruction of this empire could not have been invented by the author of evil himself than that which the depraved ambition of some men, the vanity of others, and the supineness of a third and more important class has so nearly perfected. . . . Whatever their motives may be, every step they take in setting up the labourers as a separate or independent class is a step taken, and a long one, too, towards that fatal result. . . . Mr. Brougham wishes, perhaps, for merely political purposes, to count a noisy mob on his side; Dr. Birkbeck's motive may be purely professional; Mr. Huskisson's no more than merely pedantic; they are all three, however, scattering the seeds of evil, the extent of which the wisest among them cannot anticipate.”

Certain it is that the gentlemen in question did not anticipate any such evil as this. They persevered with the scheme, and the new building was opened on 8th July 1825, Dr. Birkbeck delivering an address in which he contrasted the theory that the masses should

be kept in ignorance and subjection with the more enlightened views then beginning to prevail. The principal feature of the work of the Institution was the giving of lectures on the model, more or less, of those started by Dr. Birkbeck at Glasgow; but classes were formed, in addition, for teaching many different branches of science, languages, mathematics, etc.

The example thus set by Dr. Birkbeck and his friends was soon followed elsewhere, and Mechanics' Institutions began to spring up all around London, and in many of the leading provincial towns, though not without a certain degree of opposition. At Rotherhithe, for instance, it was declared that by being taught the principles of science the mechanic would be unfitted for his occupation, and become the victim of ambition and insubordination. One peer of the realm expressed the view that "the education of the people would make them discontented with the Government"; and it was also argued that the diffusion of knowledge among mechanics would lead to a glut of good workmen, in which case there would be a fall in the scale of wages, instead of an increase. Then, at a public meeting held at Southwark, to consider a proposal to establish a Mechanics' Institution there, an amendment was proposed setting forth that the "common people" should not have accomplishments which ought to be the exclusive possession of



persons of high rank, and declaring that the result would be to debilitate the constitutions of the mechanics, while the aristocracy would have to sweep the streets, society would be uprooted, the Government overwhelmed, and anarchy established!

Much more reasonable was the suggestion that when the mechanics all over the country were making such steady progress in the pursuit of knowledge, the middle and the upper classes must bestir themselves more, so that they would not be left in the background. "To find their carpenters, their bricklayers, and their shoemakers with greater knowledge than they possessed themselves would," as Brougham put it, "be a strange and dangerous solecism." Considerations such as these led to the founding, in 1825, of University College, in Gower Street, while as this College was established by Liberals, on a purely secular basis, the Conservative and Church party resolved, three years later, to set up the splendid group of buildings in the Strand known as King's College, where instruction in the doctrines and duties of Christianity, as taught by the Church of England, could be combined with other branches of knowledge. These two institutions, therefore, are to be regarded as a direct outcome of the movement for the establishment of Mechanics' Institutions. Of the provincial developments the chief were at Liverpool and Manchester. In the former

town Lord Brougham laid, in 1835, the foundation-stone of an institution which cost £15,000, and soon had more than 3000 members and 50 teachers; while a temporary Athenæum opened in Manchester, in 1836, was followed three years later by one that cost £18,000. Then the clergy, who, in the first instance, had not been favourable to the Mechanics' Institutions, on the ground of their purely scientific and unsectarian character, started Church of England Institutes, where educational and social work with a religious basis was carried on. Lyceums, too, were begun at Manchester and elsewhere, with a view of reaching a poorer class of the community than could be got into the institutions. Still more important was the great impetus given to the whole question of education, and not only were various societies formed with the object either of promoting education or of publishing cheap and wholesome literature, but the Government of the day were stirred into greater activity, and educational reforms were effected which might have been delayed for years longer but for the active force of an awakened public opinion.

It was not, however, only in Great Britain that the effect of the movement was felt. In November 1824 Baron Charles Dupin, a member of the Institute and the Academy of Sciences, delivered an address at the Conservatoire des Arts and Métiers, in Paris, on the

results of an exhaustive inquiry he had made at Glasgow into the educational work carried on there. He gave an account of what Dr. Birkbeck had done, declared that the whole industrial class of the city of Glasgow had been awakened into a new existence, and urged that French artisans should be enabled to enjoy the same advantages. He followed in Dr. Birkbeck's footsteps by delivering in Paris a course of lectures on geometry and mechanics as applied to the arts and manufactures, and these were so successful that within a year the French Government, coming to his help, appointed lecturers to deliver similar gratuitous courses of lectures in sixty leading towns in France. Then, in June 1824 there was established at Philadelphia a Franklin Institution on the principles laid down by Dr. Birkbeck, and Boston and many other cities in the United States followed the example of Philadelphia soon after. At St. Petersburg a Mechanics' Institution was set up in 1831, the fees of 130 of the pupils being defrayed by the State, and institutions were also formed in various other countries on the Continent, as well as in Australia, India, and elsewhere.

In his later years Dr. Birkbeck devoted much time to the further extension of the movement, and among the most interesting of the developments in which he took part was the anticipation of the demand for

increased facilities for the higher education of women, to whom the advantages of the London Mechanics' Institution were thrown open in 1830. Another important step, taken first in 1837, was the formation into Unions of the Institutions established within certain geographical areas. At the time of Dr. Birkbeck's death, in 1841, there were 220 Mechanics' Institutions in existence, 36 of these being in London and its suburbs, while the total membership was over 30,000.

To-day the Birkbeck, although the parent of Mechanics' Institutions, is itself a "Mechanics'" Institution no longer. It is now some thirty or forty years since the purely "mechanic" element began to drop off at the Birkbeck, the ordinary artisans being followed by the city clerks, engineers, students in science, art, and medicine, architects, Civil Service aspirants and others of a like class, who now form the majority of the members and students. This does not mean that the artisans, with whose welfare the original founder was mainly concerned, have been elbowed out. It simply means that in the abundance of educational facilities now available, artisan students prefer to go to polytechnics and other kindred institutions, where they can find the mechanical appliances, and acquire the technical knowledge, of which the resources and arrangements of the Birkbeck do not

permit. Some of these daughter-institutions have received so large a measure of support from public bodies that they far outshine their first parent. The action taken by the London School Board in providing such elaborate facilities for evening instruction, and the creation by the London County Council of a Technical Education Board for the express purpose of encouraging and promoting technical education, have also done much towards supplying the wants that Mechanics' Institutions and other similar bodies originally aimed at meeting, especially in regard to elementary instruction. So, on account partly of its situation in the City of London, and partly of these altered educational conditions, the Birkbeck has become a "Literary and Scientific Institution," having very wisely changed its objects and methods in order to meet the actual circumstances and requirements of the day. Its chief link both with the London Mechanics' Institution, as started in 1823, and with the still earlier efforts of Dr. Birkbeck in Glasgow, in 1800, is the popular weekly lecture; but its principal work to-day consists in the carrying on both of a day college and of evening classes, the subjects taught being of a most comprehensive character. Students are, for instance, prepared for the examinations of the University of London, for the Civil Service, and for the first Medical examination; and the classes comprise all

science subjects, languages, law, English and commercial subjects, economics, and music, together with a well-arranged school of art. The Institution likewise offers the attractions of a library, a reading-room, a magazine room and study, a Science and a Natural History Society, a Chess Club, and a refreshment and social room. The total number of students averages over 3000, and of these one-third are young women.

From the tin-smith's shop in Glasgow, where Dr. Birkbeck gave his historic first lesson to mechanics by expounding to them the science of the centrifugal pump, it is, indeed, a far cry to the splendidly-organised institutions where so good an equipment for the battle of life can now be obtained by the young of both sexes ; but those who avail themselves of these facilities may well be asked to bear in kindly remembrance the man who pioneered the movement which offers to them to-day advantages so substantial.

## SIR GEORGE WILLIAMS AND THE Y.M.C.A.

WHEN, in the year 1842, George Williams, a young man of serious views, who had come to London from Bridgwater to take a situation as junior assistant in the drapery establishment of Messrs. Hitchcock & Rogers, St. Paul's Churchyard, gathered around him in a bedroom there some of his colleagues for the purpose of religious converse and prayer, he little thought that he was sowing the seed of so mighty an institution as the Young Men's Christian Association has become. There are now in the United Kingdom 1471 centres at which the Y.M.C.A. is represented, with a membership of over 100,000; in our Colonial possessions there are 279 associations, with 27,000 members, and in foreign countries (including such places as Persia, China, Japan, Madagascar, Liberia, and Iceland) there are 5457 associations and 406,122 members, giving a grand total of 7207 associations and over 500,000 members; while the buildings held by them represent an approximate value of £5,267,000. In Germany alone there are

1687 centres, with 92,500 members, and in the United States 1355 centres, with 230,697 members.

The figures just given show what a very large oak has been produced from so very small an acorn within a period of less than sixty years, and to few pioneers has the mercy been vouchsafed of seeing such great results brought about during their own lifetime. Not that Sir George Williams is at all inclined to take any credit to himself for this outcome of his original efforts. It is the first principle of his faith that he has all along been "in everything the steward and instrument of God," and that "it was God Almighty who inspired the thought." True, also, it is that the idea of gathering together young men for spiritual converse and prayer was not in itself a new one. Such gatherings, indeed, go back into what may be regarded as the ancient history of social and religious progress in London. Walter Wilson, in his *Life of William Kiffin*, a leading Baptist merchant, refers to the existence in London, in 1632, of an association composed of apprentices who met together at five o'clock on Sunday mornings "for prayer and religious conversation." Later on the apprentices formed a sort of religious club, and met in a public-house, where the members secured a room to themselves in return for an expenditure of one or two shillings in refreshments, committing a pious fraud on the inn-keeper as to the



real object of their gathering. Then it is known that about 1678 a number of young men, members of the Church of England, in the cities of London and Westminster, formed societies for a like purpose, and out of the work thus started there grew various "Societies for the Reformation of Manners." Early in the eighteenth century there were in Boston young men's religious societies known as "Young Men Associated," while in the early part of the nineteenth century David Nasmyth, the founder of the London City Mission, started about seventy Young Men's Societies in the United Kingdom, France, and America.

But although there was thus nothing absolutely original in the initial efforts of young George Williams, the fact remains that what had previously been done in this direction had had no widespread or lasting result, and it was from the action which he himself took, in the days when he was a junior assistant in the drapery house in St. Paul's Churchyard of which he afterwards became the head, that the history of the movement really dates.

Born at Dulverton, Somerset, in 1821, and educated at Tiverton Grammar School, George Williams entered a draper's shop at Bridgwater as an apprentice, and it was there, as a youth of sixteen, that he first came under the influence of strong religious feeling. The

immediate effect was to arouse in him a deep concern for the spiritual welfare of those associated with him in business, and he spoke with them so earnestly, and with such good effect, that he induced a number of them to adopt his own views and convictions. On proceeding to London he found living in the establishment of Messrs. Hitchcock & Rogers about eighty young men assistants, very few of whom were professing Christians, while among them were many profligates. So long as they did their work properly during the day no further interest was taken in them in the way of securing their comfort and welfare, and they were left to their own resources as regarded their leisure time. There was no home-life indoors—not even a room where an hour's quiet study could be indulged in; and most of the young men spent their time either in the streets or in the public-houses. Of drapery-trade assistants, bank clerks, and others "living on the premises," who found themselves in this position in London, there were then about 150,000.

The earnest efforts which George Williams had made at Bridgwater were followed up by him in the Metropolis. On his speaking to some of the other young men in the establishment he had entered they agreed to meet him in one of the bedrooms for prayer and Bible study, and also for the purpose of reading *Finney's Lectures* together, after the day's work was

done. They invited other of their colleagues to join them, and soon there were more wanting to come to the gatherings than the bedroom would hold. Then, with a certain amount of fear and trembling, an application was made to Mr. Hitchcock to allow them the use of a larger room for the meetings. He consented, expressed most cordial sympathy with what was being done, and from that time became "the father of his household." Regular meetings were now held on the premises, and they were so successful that Mr. Williams longed to see a similar movement started in every other large establishment in London.

To this end he convened a friendly conference at 72 St. Paul's Churchyard, on 6th June 1844, and it was then decided to organise "A Young Men's Christian Association" in order "to improve the spiritual condition of young men engaged in the drapery and other trades." A committee of management was appointed, two honorary secretaries were chosen, Mr. Hitchcock became the first treasurer, and the movement was fairly launched on its career.

For the earliest meetings of the new association a room in a small coffee-house on Ludgate Hill was sufficient; but when the attendance grew to seventy members there was a removal to what was then Bradley's Hotel in Bridge Street, Blackfriars. The gatherings at that time took the form exclusively of

Bible classes and prayer-meetings. In March 1845 the number of members had increased to 160, and a branch was opened in the West End of London, for young men engaged in business there. In the following November it was decided to widen the scope of operations by forming a Mutual Improvement Society, and a course of lectures was started. Then the opening of the West End branch was followed, in 1846, by further branches in Islington, Pimlico, Southwark, and other places in London; while as the provincial towns got to know what was being done in London they became anxious to do the same, so that before long there were branches in Oxford, Derby, Hull, and Bath.

By 1848 the membership in London amounted to 480, and that in the provinces to 1000. The opening of further branches alike in London and in the country went on with great energy, and in 1849 larger premises for the central offices were taken in Aldersgate Street. In November 1851 the first transatlantic association was started, at Montreal, by two young men who had gained some knowledge of the London work through published copies of the lectures referred to above, and a month later the first Y.M.C.A. in America was begun at Boston. In 1851, also, the first Y.M.C.A. in Holland was founded at Amsterdam. Other countries afterwards took up the movement, and in 1855 there was held in Paris a general conference of delegates

representing Young Men's Christian Associations already formed in Great Britain, France, Germany, Belgium, Holland, Switzerland, and the United States. The following basis of federation for the associations in the different countries was then arrived at, and it was re-affirmed at a joint meeting of British and Colonial representatives held at Dublin in June 1899:—  
“Young Men's Christian Associations seek to unite those young men who, regarding the Lord Jesus Christ as their God and Saviour, desire to be His disciples in their doctrine and in their life, and to associate their efforts for the extension of His kingdom.”

This basis of federation must be borne in mind by those who would understand aright the real purpose of the associations. They have developed many social and educational branches of their work of late years, in order to meet the conditions of present-day life, but the fundamental object still most earnestly kept in view is to secure “an active propaganda on behalf of young men on a spiritual and evangelical foundation.” Each full member must be a communicant or a member of a Christian Church, and is expected to be an evangelist to his fellow young men; though there is, also, an associateship open to “any young man of good moral character,” which carries with it participation in all privileges except control, the management of each association being vested alone in the membership.

The work is carried on by young men for young men, and one of its most characteristic features is the evidence it affords of a great activity of the laity in relation to matters of religion formerly left almost exclusively in the hands of recognised ministers of the gospel. The associations seek to be helpers to the Churches by means of effort and service directed towards a class of persons not easily reached by ordinary Church agencies. They aim at leading young men into the fellowship of the Churches, and under the influence of the Christian ministry; but they "earnestly disavow any intention or desire to enter upon functions proper to the Churches."

Along these lines the movement has grown and expanded until it has assumed the dimensions shown by the figures already given. On the occasion of the Jubilee of the Y.M.C.A. in London in June 1894 (when the honour of knighthood was conferred on the founder, who also received the honorary freedom of the City of London), the celebrations were attended by delegates speaking seventeen languages, and representing the work carried on among twenty-six nationalities. Nearly a thousand men are now devoting their whole time to the secretaryship of the associations in various parts of the world; and in Great Britain, especially, there has been considerable expansion since 1880, when Exeter Hall was taken over, at a cost of

£55,000, as the headquarters of the work. It is calculated that every week 15,000 young men assemble in the Association Bible classes of this country, while for several years past over a hundred young men, "encouraged and primarily trained in the association," have each year entered the Christian ministry or the foreign mission-field.

Each association, at home or abroad, enjoys complete self-government on the broad lines referred to above, and arranges its plan of work according to national or local requirements. As illustrating the general nature of this work it will suffice to refer to the operations of the Central Y.M.C.A. in London. These are carried on in three buildings,—Exeter Hall, Strand; 186 Aldersgate Street; and 59 and 60 Cornhill. The accommodation on the "social" side includes reading and social rooms, forming a pleasant place of resort for youths and young men; libraries and writing rooms, drawing and music rooms, and restaurant, buffet and tea room, and halls and rooms for meetings. Other features on the social side are a Literary and Debating Society, lectures, an employment bureau, an apartments register, and seaside homes. On the "intellectual" side there is at each centre a series of educational classes, the curriculum of which includes languages, commercial subjects, preparation for Civil Service examinations, Science and Art, University Extension Lectures, etc.

On the "physical" side there is a well-equipped gymnasium at Exeter Hall, together with a Rambling Club and a Photographic Society; while the "spiritual" side comprises young men's meetings, of which a number are held during the week; a conversational Bible class, public prayer-meetings, Sunday services, etc. It will thus be seen that in London, at least, the original programme has undergone considerable expansion, in order to meet the exigencies of the life of young men in great cities; but the first principles are still rigidly adhered to, and the primary Christian and missionary aspects of the membership are kept well to the front, one of the greatest objects being to establish spiritual and evangelical influences in the minds of young men as a part of their daily life, without in any way spoiling them for their daily calling. So well has this aspiration succeeded, that leading business men have testified that many of their smartest and most trustworthy employés have been taken from the ranks of the Y.M.C.A.

In all the various developments that have taken place in connection with the associations the leading part has been played by Sir George Williams, whose name as their original founder is honoured all the world over. He threw himself heart and soul into the movement he founded; he contributed to it a third of his entire income, and the Hon. John Wanamaker, late



Postmaster-General of the United States, has said of him, that "there is not any other one man in the world to-day who has touched so many men for good"; while it has been declared of the associations that they have made "a deep mark upon the young men of this age, upon the Church of God, and, indeed, upon the world at large." There are many other forms of religious and philanthropic effort to which Sir George Williams has given a helping hand, but his pioneering of the Y.M.C.A. has been the great work of his life, and it constitutes his chief claim to the handing down of his name for the veneration of posterity.

## THE RISE OF THE POLYTECHNIC

JUST as the Birkbeck Literary and Scientific Institution in Breems Buildings recalls the original founding of Mechanics' Institutions, and just as the Y.M.C.A. formed in 1844 inspired a vast number of kindred organisations, so must the famous Polytechnic in Regent Street, which to-day has its 15,000 students and members, rank as the parent of the other Polytechnics that have been started in London and elsewhere, and also as a pioneer in this country of the general movement for the promotion of technical education.

As founded and developed by Mr. Quintin Hogg, the Polytechnic sought to discharge a function distinct from that of either Mechanics' Institutions or Young Men's Christian Associations. While the Mechanics' Institution, as such, aimed primarily at teaching science to mechanics, and while the fundamental principle of the Young Men's Christian Association was to bring spiritual influences to bear on young men in business, the Polytechnic aspired to combine these two classes, and supply advantages for both, on a common footing,

operating on a fourfold basis in accordance with what were regarded as the fourfold requirements of human life,—intellectual, physical, social, and religious. Only by studying and providing for these four phases of his character could, it was held, a level-headed man be produced.

In the department of its work which embraces the teaching of trades the efforts of the Regent Street Polytechnic have been especially fruitful in good results. It was there that the Duke of Devonshire went when he desired to get up the facts bearing on the subject of technical education, and the inquiries he then made were the initial step to his becoming chairman of the Technical Education Commission, and to the allocation of the beer and spirit duties for the development of technical education in the country generally. Then, when the Charity Commissioners had a large sum of money—about £100,000 a year—to dispose of, and wished to discover the best way to promote a technical instruction which would benefit the lower rather than the middle classes, they made an exhaustive investigation into the working of the Regent Street Polytechnic, and, after comparing it with other institutions at home and abroad, they determined to take it as a model, and promote the establishment of a series of similar institutes throughout the Metropolis. This they did by offering to double

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any subscription raised for that purpose, and the result has been the erection of a number of Polytechnics—such as those at Battersea, Chelsea, Clerkenwell, Holloway, Woolwich, and elsewhere—which carry on most elaborate schemes of technical education in more or less palatial edifices that completely dwarf in splendour, though not in usefulness, the parent institution in Regent Street. With subsidies from the Charity Commissioners, liberal support from the Trustees of the City Parochial Charities, generous donations from City Companies, and pecuniary resources in other directions, these Polytechnics have been able to launch out on a truly magnificent scale. They offer to the rising generation specially-equipped institutions where every possible opportunity is afforded them of gaining a practical knowledge of the trades or professions to which they propose to devote their future energies.

Such is the position to which Polytechnics have attained in the educational system of to-day. Let us now see how it was that the first of them all came into existence.

Among the boys at Eton in the early sixties was one, Quintin Hogg by name, who had early come under the influence of religious feeling, and held there a Bible class which was attended by half the boys in the school. Son of the Right Hon. Sir James Weir

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Hogg, Bart., M.P., he was one of a family several of whose members were to rise to distinction in after-life. Quintin Hogg himself was to acquire a great interest in sugar plantations in the West Indies, and attain to such prosperity as to be able to spend £150,000, from first to last, on his Polytechnic scheme, besides giving it £1000 a year. He was formerly senior partner in the firm of Hogg, Curtis, Campbell, & Co., and has since been associated with various important public companies. But at the time our story opens Quintin Hogg was still at Eton, gaining the seeds of knowledge for himself, and endeavouring to sow the seeds of religious truth in the minds of his fellow-schoolboys. He left Eton at the end of 1863, and returned to London with the idea of devoting his energies to mission work in the Metropolis.

As a preliminary step he turned his attention to the boys of London, and he hoped to produce on them the same good impression that he had tried to make on the boys of Eton. The conditions, however, were very different indeed, and young Quintin soon made acquaintance with a poverty, a squalor, and a wretchedness which were quite new to his youthful experience. He recalls one place, off Bedford Bury, known as Pipemakers' Alley, and inhabited almost entirely by Irish immigrants, where on one occasion he found in all the houses in the court only two bed-

steads, the rest of the people sleeping on bundles of rags. The attractions of the playing-fields of Eton made him also particularly sensitive to the fact that there was no playground besides the streets for the ragged children whom he saw running about wild in London, and receiving no education at all. He felt, as he says, that "he would go mad unless he did something to try to help some of the wretched little chaps." His first effort was to offer to two crossing-sweepers, whom he picked up near Trafalgar Square, to teach them to read. For this purpose he went with them to the Adelphi Arches, which were then open both to the tide and to the street (the Thames Embankment having then not been made), and there, with the light from a tallow candle stuck in an empty beer-bottle, he began to give them their first lesson, using two Bibles for reading-books. But when a policeman's lantern suddenly appeared at the far end of the arch, the boys extinguished the candle and—bolted.

Young Quintin thought that before he made any further attempt to teach the street boys of London he had better learn more about them himself,—their habits, their wants, their slang, and their ways of life in general. He was at this time a junior in the West Indian house of which he afterwards became the head, and he resolved to devote two or three evenings a week — after office hours — to getting into personal

touch with the boys. Going down to the New Cut, on the south side of the river, he bought a second-hand shoeblack's outfit,—clothes, box, brushes, blacking and all. In this disguise he became an amateur shoeblack, and he played his part so well that his own father failed to recognise him on one occasion when passing him in the street. He also occasionally earned an honest penny by blacking the boots of his personal friends, who little thought that the shoeblack they were patronising was an intimate acquaintance! Not content with mixing with the boys on such expeditions as these, he would sleep out with them on barges, under tarpaulins, on a ledge in the Adelphi Arches, or elsewhere. Sometimes he varied his occupation by going about Covent Garden market, holding horses or doing odd jobs, as the other boys did. So much, too, did his young friends win their way into his affections that occasionally, in his father's house in Carlton Gardens, when the family came down to breakfast, they found that Quintin had been before them, and had carried off the choicest viands for his protégés, the street arabs.

After about six months of this sort of life Quintin Hogg started a Ragged School, hiring a room at a rental of £12 a year in a house in York Place, off the Strand. He also engaged a very earnest woman to take charge of the school. At first the boys were

received only during the day, but the teacher urged that a night school should be opened as well, and Mr. Hogg assented, provided she would maintain order by herself. But on the first night there was a reign of terror, and word was brought to Mr. Hogg, who was then in bed with a feverish cold, that a "row" was going on in the school, that the police had been called in, and that the boys were pelting them with the slates.

"In about three minutes," says Mr. Hogg, "I had huddled on just sufficient clothes to suffice me, and, slipping on an overcoat as I went through the hall, I made for the Ragged School as hard as my legs could carry me. On arriving I found the whole school in an uproar. The gas fittings had been wrenched off and used as batons by the boys for striking the police, while the rest of the boys were pelting them with slates, and a considerable concourse of people were standing round in a more or less threatening way, either to see the fun or to help in going against the police. I felt rather alarmed for the teacher, and, rushing into the darkened room, I called out to the boys to instantly stop and be quiet. To my amazement the riot was stopped immediately. In two minutes the police were able to go quietly away, and for the first time in my life I learned that I had some kind of instinct or capacity for the management of elder boys."



For the next three or four years Mr. Hogg was scarcely absent from the school a single night, and not only did it grow in popularity but there was a distinct improvement in the boys themselves. The room was only thirty feet long by twelve feet wide, and would not hold anything like the number of lads who wanted to be taught. Mr. Hogg, therefore, arranged for two sections of sixty each, the first attending from 7 to 8.30, and the second from 8.30 to 10. Five separate gangs of thieves came to the school, all of whom within the next six months were earning their livelihood more or less respectably. The school, too, became less "ragged," the boys being more orderly and turning up better dressed than was the case at first, when five of them put in an appearance wearing absolutely nothing but their mothers' shawls pinned round them!

In 1865 a second room was added, and in 1866 the adjoining premises were taken, and turned into a "twopenny doss-house" for boys, as an alternative to thieves' kitchens and low-class lodging houses. In this "doss-house" Mr. Hogg had a room for his own use in the attic. Then came a removal to a large warehouse near Drury Lane. Here, in addition to ragged-school accommodation, there was space for a dormitory for forty boys.

The next step, taken in 1871, was the setting up

of a separate Institute for the more respectable youths in Hanover (now Endell) Street, midway between Drury Lane and Seven Dials. Various classes were started, and attention was given not only to the mental but also to the moral and physical condition of the members. In 1878 still larger premises had to be taken for this Institute in Long Acre. Even there only 500 could be accommodated, and that number was speedily reached, so that fresh applicants had sometimes to wait twelve months before they could be admitted. Within seven years there were over thirty classes in active operation, the Institute was working in co-operation with the Science and Art Department, a library of 1300 volumes had been got together, and a paid secretary had been engaged.

“By this time,” says Mr. Hogg, “I had got pretty well into my mind what it was I wanted in the way of an Institute, the idea in my mind being that no Institute then existing was sufficiently catholic in its tastes and aims. There were purely religious associations, like the Y.M.C.A., most of which had neither athletics nor even sufficient educational attractions; there were educational institutions, of which the Birkbeck may be taken as a notable example, which made no effort at all either on the spiritual or the physical side; there were athletic clubs, but these, too, confined themselves solely to athletics. What

we wanted to develop our Institute into was a place which should recognise that God had given man more than one side to his character, and where we could gratify any reasonable taste, whether intellectual, spiritual, or social."

Such was the scheme as ultimately evolved in the mind of the earnest worker who had begun by giving a reading lesson to a couple of street arabs by the light of a tallow candle under an Adelphi arch; and the opportunity was now approaching for this broader scheme, the outcome of so much effort and practical experience, to be carried into full effect. In 1881 there came into the market a building in Regent Street known as the Polytechnic, and previously devoted to entertainments of a scientific type, such as Pepper's Ghost, illustrations of the use of the diving bell, and so on. The idea occurred to Mr. Hogg that this was just the sort of place that was wanted for an Institute on the broader lines he had projected. He purchased the building from the trustees for £50,000, the name "Polytechnic" was taken over as well as the premises, and the removal to the new quarters was effected in September 1882. Mr. Hogg had designed the place for 2000 members, but 1000 joined the first night, and 6800 during the first winter session.

From this time the story of the Polytechnic is

one of constant expansion and development. Far-sighted as Mr. Hogg was, he had no idea of the enormous success to which the project he had set on foot would attain. He had thought the premises bought by him in Regent Street would meet all possible requirements; but within seven years of the purchase two new storeys, containing thirty additional classrooms, were added to the gymnasium. Then a new series of workshops has been excavated in the basement, adjoining premises have been absorbed, a swimming bath has been provided, and, altogether, additions, alterations, and improvements have been carried out costing £100,000 over and above the £50,000 paid for the original buildings. Even as it is the accommodation is scarcely sufficient to meet the requirements of 15,000 members and students, with all the classes, clubs, and other interests which are embraced in the working of the Institute.

Of the extremely varied and comprehensive nature of the work carried on it is difficult to convey within available space any really adequate idea. There are practical trade classes (for apprentices and young workmen) in boot and shoe making, carpentry and joinery, staircase and hand railing work, metal-turning and dynamo - building, bicycle - making, plumbing, upholstery, typography, tailoring, metal - plate work, etc.; and there are technical classes in brickwork

and masonry, sanitary engineering, land surveying, cabinetmaking, carriage - building, painting, smiths' work, telegraphy, electrical engineering, gas manufacture, letterpress-machine work, linotype, etc. Then there are classes for special preparation for the Civil Service and for the University of London examinations; there are commercial and general classes; there are special classes for young women; and there are also in connection with the Polytechnic distinct "schools" of music, science, art, shorthand, typewriting and bookkeeping, architecture, printing, chemistry, carriage-building, engineering, cookery, and the photographic trades. A technical and continuation school for boys from eleven to seventeen, and a school for girls, are likewise carried on. Another great feature of the work of the Polytechnic is the organisation among the members themselves of some forty different clubs and societies, embracing sports, athletics, volunteering, rambling, a Polytechnic Parliament, French, German, shorthand, total abstinence, sketching, engineering, natural history, photography, mutual improvement, reading circle, etc. Pleasant Sunday afternoons and religious services, on an undenominational basis, are conducted; numerous social gatherings take place during the winter; and there is, too, a Young Women's Polytechnic, which has a membership of about a thousand. As for the Polytechnic

tours, at home and abroad, they have become so popular that the number of their patrons is now about 10,000 a year.

The illustrations given above do not exhaust the list of efforts and advantages of which the Regent Street Polytechnic is the centre, but they indicate the variety and magnitude of the work, and they show, too, that for young men who have the will to equip themselves for the battle of life there is undoubtedly the way. The establishment of such an institution as the result chiefly of the energy and liberality of a private individual is in the highest degree honourable to Mr. Hogg, though, happily, he does not now have to bear the financial burden of meeting the deficiency that is left after the receipt of the very modest subscriptions and fees from the members and students, the Charity Commissioners and other public bodies being contributors to the support of the work in its later developments.

That the fourfold basis on which the Regent Street Polytechnic has been established was pre-eminently a wise one is well shown by the results. Mr. Hogg is himself inclined to lay special stress on the social side of the work. Asked on one occasion to what he attributed the success of his efforts, he said:

“I think the mistake of many who have failed

in this domain is that they have neglected the social element. Young fellows who have been at work all day don't always want in the evening to attend either a prayer-meeting or a lecture, or even to read books and magazines. You must provide opportunities for amusement, recreation, and friendly chat. In short, boys must play as well as work. I attribute the remarkable success of the Polytechnic largely to the fact that we have provided the members with rational amusement and facilities for getting to know one another and making friendships."

This rational amusement has been a means to the end in securing the more solid and lasting advantages indicated above, and the good that has been done, alike by the parent Institution and by those that have been more or less inspired by it, is a leading factor in the industrial, intellectual, social, and religious advancement of the youth of our great cities. The modest candle with the help of which Mr. Quintin Hogg opened his first Polytechnic in the Adelphi Arches, with a class of two, has been succeeded by great centres of light and leading which have exercised a powerful influence on the lives of many thousands of young people, and the pioneer thereof well deserves a place of honour among the great social reformers of the day.

## A REPUBLIC OF BOYS AND GIRLS

THE short histories already given of various great organisations promoted in the United Kingdom for the advancement of youths and young men belonging to the middle and artisan classes may be supplemented by some details respecting an experiment in the United States which aims at the elevation of young persons of a lower rank in the social scale, by means of a system based not alone on self-help, but on self-support and self-government. This experiment, as represented by the George Junior Republic at Freeville, Tompkins County, New York, is still in its infancy, for the Republic was only founded so recently as 10th July 1895; but a number of other Republics on the same lines have since been set up elsewhere in America, the whole subject is being carefully studied by those who are interested in social science, and it may be that we are at the beginning of a new development which will exercise as powerful an influence on the lives of the poorer children in our great cities as the older movements



already spoken of have had on the lives of the particular classes for whom they were established.

The founder of the George Junior Republic is Mr. William R. George, a resident of New York, whose strong religious impulses had led to his showing an active interest in the "fresh air" work carried on among the poor children of New York city. He was accustomed to going every summer with his mother to their farm at Freeville, nearly forty miles distant from that city, and in the early nineties the idea occurred to him that he would take a number of children there, and give them a fortnight's outing. He took twenty-two boys the first year (the girls did not come in until later), and then between 200 and 250 for several years in succession. To begin with, he followed the usual practice, giving the children "everything for nothing," and he supplemented his free hospitality by gifts of farm produce which the children could take home, and of clothing sent for them by friends who heard what he was doing.

But in reflecting on the matter he began to question whether this sort of philanthropy was altogether good for the children. He thought it led them to accept benefits as a matter of course, without any obligations being imposed on them in return, and tended to fill their minds with expectations that might prejudice their self-reliance in later life. He accordingly announced

one day that thenceforward the farm produce and the clothing would be given only in return for work done. The news caused the boys to get into a state almost of revolt. The presents had impressed them more than the benefits they derived from their stay, and one of them even asked Mr. George "what he thought they were there for?"—an inquiry which made that gentleman even more determined to adhere to his resolve.

Mr. George soon decided to go still further. Not only should the visitors work for what they took home with them, but they should work for their own maintenance. There should be "Nothing without Labour," and these words were not only adopted as a motto, but became in the most literal sense the fundamental principle of the experiment that followed. The idea of charity should be got rid of altogether. The children should be taught the value and the dignity of labour. They should have practical lessons in economic laws which would make them better fitted for the future battle of life. Not only, too, should they learn how to help themselves, and to support themselves, but they should govern themselves, acquiring a sense of responsibility, an experience in the making and the enforcing of laws, and a knowledge of the primary obligations and privileges of citizenship. In this way he hoped alike to form their characters and to save them from that

wrong-doing which he regarded as mostly due to the misdirection of youthful energy.

This might seem an ambitious programme to carry out in respect to the lowest type of children in the city of New York; but Mr. George regarded it as quite a practicable one, and in the summer of 1895 he established the George Junior Republic. In that year the term of residence was for two months only in the summer; but early in 1896 a farm of 48 acres was purchased by the trustees of a corporation which Mr. George formed for the purpose, the existing barns and sheds were remodelled to serve as barracks, fresh permanent buildings were put up, and to-day there is a complete settlement, with accommodation for over a hundred children, of whom forty remain through the winter. It is, however, in no sense a penal settlement, and it has no State support. The Courts do not commit offenders there, except under suspended sentence, but parents or guardians may assign children to it, those who can afford to do so paying a fee, while some of the children go to the Republic of their own accord, none under sixteen being refused admission. Actual citizenship lasts till twenty-one. Farm-work, etc., enables the community to be partly self-supporting, but donations and subscriptions are needed as well.

The Republic represents a community which is

absolutely free and self-governing. The laws of the New York State are the foundation of those in force, but they are supplemented by special laws passed by the Congress of the Republic. This Congress has two branches, a Senate and a House of Representatives, the suffrage being exercised by all citizens over twelve. The senators remain in office two weeks, and the representatives one week, the Congressional Session also lasting one week. At first Mr. George (who, it may be said, is still a young man) occupied the post of President of the Republic, and possessed a power of veto; but he now no longer holds any office except the paternal one of "daddy"; and though he formerly exercised his power of veto once or twice when laws were passed which he thought detrimental to the interests of the community, he does not do so now, being of opinion that wisdom is more likely to be gained when those who make mistakes discover them by experience and learn how to avoid them. To secure observance of the laws there is a regular police force, the members of which are dressed in uniform, and carry a staff of office, such being the respect of the community for these representatives of justice that a very small boy, occupying the post of constable, will arrest and march off to prison an offender much older and much bigger than himself, without any resistance being offered.

The offences for which citizens are taken into

custody include breaches of the peace, cigarette smoking, littering the grounds, going out of bounds without a pass, etc. Arrested persons are taken before the judge of the Criminal Court, which meets in the schoolhouse in the evening, the proceedings being conducted with a judicial gravity which could hardly be surpassed in an ordinary court of law. The accused are entitled to trial by jury, there is a State attorney, and the prisoner may be represented by a "lawyer,"—if he can afford to pay one, the said lawyer being a boy who has become "qualified" by passing certain examinations. Considerable skill and judgment are shown by the young people in the hearing of the cases. The examination or cross-examination of witnesses is smart and to the point; the judge, though perhaps only a boy of fourteen or sixteen, passes sentence without hesitation, and Mr. George says he has never known of a wrong verdict or an unjust decision. The punishments take the form of fines or detention in prison. The fines are by no means nominal, and there is a stern reality about prison life in the Republic which is not at all relished. The offenders are put in narrow cells which have barred doors and plank beds; they are watched by warders with bunches of jangling keys; they have the plainest of food, and they have to work all day at making ditches or breaking stones.

One of the earliest laws passed by the Congress of

the Republic was the law of 1895 which declared that "A feller what don't work shan't eat." To aid in carrying out his fundamental principle of "Nothing without Labour," Mr. George established a special coinage, the coins being made of tin, and representing the various denominations of ordinary United States currency, from one dollar downwards. This coinage is alone recognised in the Republic. It is distributed by the "Government" or by "contractors" for labour done, and food, lodgings, etc., have to be paid for with it. The citizens are expected to work in the mornings, their afternoons and evenings being free to themselves, and those who do not work find themselves without money. Very soon after the Republic was established the workers declined to be responsible for feeding the non-workers, and it was enacted by Congress that after a certain date all the unemployed should be regarded as vagrants, and put on to "public works," so as to be compelled to do something for the community to which they looked for support. In such cases the discomforts and the discredit of being in a penniless condition soon made the idle ones willing to take to remunerative employment.

In addition to the Criminal Court there is a Civil Court, and each is freely resorted to, so that though the citizens come from the lowest quarters of New York they rarely try to take the law into their own hands. The office of policeman seems to be especially

attractive to the New York boy; but it can only be obtained as the result of a competitive examination, which, as it happens, has the further effect of impressing on the boys the value of education. One of them who had failed to pass was heard to say, "I don't play hooky this winter, you bet! I'll come back here next year, and git to be a cop."

The Republic imposes taxes, maintains a bank, and levies duties on clothes that may be sent to the citizens from their relatives, such duties being imposed in order that the citizens shall be compelled to pay for everything out of their earnings. It also raises money on the sale of licences for the privilege of conducting the various "hotels" and restaurants, on the sale of contracts or concessions, and on the grant of permits to go outside the domains of the State at will. The bank further receives on deposit the surplus wages of the citizens, grants loans to contractors and others, and pays weekly the wages for Government work. This work is not necessarily manual labour, there being various official positions to which salaries are attached. The judges of the Civil and Criminal Courts are the best paid of all, receiving 1 dollar 20 cents per day each. Legislators get 1 dollar 10 cents per day. The Chief Commissioner of Public Works, the Chief of Police, the warden of the prison, and others, all receive fixed rates of pay, down to the members of the street-cleaning

gang, who have eight or ten cents per hour. For the ordinary citizen the highest type of business is keeping hotel, the weekly contracts being sold by the Government every Saturday afternoon. In the earlier days of the Republic all the citizens lived in hotels, according to their means. These hotels are under the daily supervision of Inspectors of the Board of Health (of which body the mother of Mr. George is a member), the work of bed-making, etc., being done by the hotel-keeper for the week; but model cottages are now being substituted for hotels. The cottages are bought up by "syndicates," and are either occupied by groups of citizens of congenial temperament, or are conducted as boarding-houses. In each cottage one of Mr. George's adult assistants lives, acting as "house-mother" or "house-father" as the case may be. Then the citizens who so desire can learn farming, either on the 48-acre farm belonging to the community, or on another which has been leased close by; they can learn dairying, forty cows being kept for the supply of milk and butter; there is a skilled carpenter who gives lessons in his trade,—indeed, some of the cottages referred to above are being built under his direction by the boys themselves; there is a printing-office where the *Citizen*, the newspaper of the Republic, is produced, and jobbing work done for the district round about; and there is day labourers' work in the making



of ditches and the cleaning of streets. More ambitious youths may become judges, lawyers, politicians, contractors, or store-keepers; but all of them must work in one way or another if they are to gain the money with which alone (unless they are willing to be treated as vagrants) they can obtain food and lodging. Although work is theoretically optional, it becomes compulsory, in effect, because of the circumstances in which the citizen is placed.

The Republic was started with boys alone, but girls are now joining in steadily increasing numbers. At first they allowed the boys to do all the Legislative and other public business; but after a time they demurred to taxation without representation. So they started a Woman's Suffrage movement, and got the privilege both of voting and of sending girl members to the House of Representatives. They next secured the right of holding office, and there has been a girl judge to try girl prisoners, there has even been a girl policeman, while lassies share with lads the duties and responsibilities of jurors. The girls learn millinery, dressmaking, cooking, laundry work, etc., the rule, "Nothing without Labour," applying to them equally with the boys.

There are regular scales of pay for all the work that is done, and those of the young people who are industrious and thrifty, and especially the contractors and the speculators (who bring into camp fruit, candies,

and knick-knacks, which they retail at a good profit), accumulate substantial sums in the coin of the Republic. With this coin they can ultimately buy from the Government either farm produce (some of them take back to New York sufficient potatoes to last the family all the winter), or clothing from the stores where contributions from outside friends are collected. Nothing is a "gift" in the Junior Republic.

The duration of the stay in the Republic may range from a month to five years or more, according to circumstances. Some of the new-comers, affected by homesickness, will occasionally try to desert; but there is no case on record of any boy or girl who has got accustomed to the place leaving it without permission.

The citizens are free to follow their own inclinations whether or not they attend the undenominational services which are held, but the majority of them do so. There is also a Sunday school (which supports a girl missionary), together with a Junior Endeavour Club. Then there is, too, a school in the Republic to which all children under sixteen must go, older citizens who wish so to do attending a high school three miles distant. Children under twelve, and therefore not qualified to vote and act as "citizens," are put under the charge of older boys or girls, who are said to acquit themselves of the responsibility with a care and a solicitude which are very touching.

One of the most striking results of the working of the Republic has been the development of individuality in the citizens. There is no danger of their becoming the automata of such highly-organised systems as those to be occasionally found in large "institutions" conducted on ordinary philanthropic principles. The smallest Republic in the universe is a sample, in miniature, of that great world beyond in which the young people will one day play their rôle, and for which they are now being fitted. Apart from the ordinary teaching of trades, they learn the true meaning of such words as "citizenship," "self-maintenance," and "self-government"; they get such an insight into economic laws as could hardly be given to them in a more practical way by any other method; they are prepared by means of various small responsibilities now to meet the greater responsibilities of future years; and they learn not only to make laws but to respect them, and to appeal to them when they are made. The difference between such free and independent "citizens" as these and the ordinary "charity boy" or "charity girl" of British philanthropy is enormous.

The system on which the Junior Republic has been founded is admitted to be no more absolutely perfect than any other system of human government yet invented. But that good results are being obtained is undeniable. One of the most hopeless cases admitted

was that of a boy who had joined the criminal ranks at the age of seven, had five times set fire to buildings for the mere pleasure of seeing a blaze, and had become an absolute terror to the neighbourhood in which he lived. As a last resource he was sent to the Junior Republic, was put in charge of an older boy, and proved so amenable to the new influences surrounding him that he became quite a useful and law-abiding citizen. The jail of the Junior Republic is a much more serious business for boys than the prisons of New York. Mr. George once said to a visitor in reference to a boy who had just been sent to jail: "I saw that boy sentenced once by a police judge in New York, and he laughed in the judge's face. The spirit of the outcast was so strong in him that he deemed himself a hero because he had fallen under the ban of the civil law, and he knew that he would be so regarded by all his associates. But this afternoon, when a boy no older than himself pronounced upon him the sentence of our Court, he broke down and cried. I have seen this same thing four times in this very place."

The fact is that the citizens of the Junior Republic waste their sympathy neither on vagrants nor on criminals; and, though imprisonment is itself no pleasant matter, the subsequent disgrace, in the eyes not so much of men as of one's fellow-boys, is even worse. In one instance, at least, a lad tried to commit suicide

rather than meet such disgrace. Even the worst offenders rarely come under the operation of the law after their first visit or their first few months.

As regards the after-life of the citizens, it may be mentioned that several of them have entered on a collegiate career, and there is a general demand by employers for Republic boys, on account of their recognised ability and trustworthiness.

The idea of the George Junior Republic has answered so well that, as already mentioned, it is being taken up in other parts of the United States, among the institutions which have recently adopted the principle being the Massachusetts State Reformatory. In fact the Junior Republic would seem to be as distinct an advance on the average reformatory as the latter was on the old system of sending young offenders to herd with hardened criminals in the ordinary jails. It not only, too, provides an alternative alike to prison and to reformatory in dealing with juvenile criminals, but it deals with, in good time, those who are in danger of becoming juvenile criminals by reason either of their natural inclinations or of defective guardianship.

Whether or not we are on the eve of seeing a widespread development of this new principle, one thing, at least, is certain, that the individual who conceived it, and has already placed it on so practical a basis, well deserves to be numbered among the Masters of Men.

## THE REVOLT OF HODGE AND THE MAN WHO LED IT

THE Communion service was to take place in the parish church of the Warwickshire village of Barford, and the boys and girls who had attended the ordinary service rose and left with the non-communicants when the sermon was over and the benediction had been given. But one of the boys was curious to know what sort of a service it was which the young people might not attend, and he was the more curious because his father—a plodding, peaceful, sober, and industrious agricultural labourer—was among those who had remained behind. So when the last of the non-communicants had left the church, and the door had been closed, the boy in question stole back, remembering that in the door there was a keyhole which gave a perfect view of the interior of the church. Through that keyhole he watched the service; but when he saw that his father and the other agricultural labourers present did not approach the altar rails until the Communion had been administered to all the other worshippers, beginning with the squire,



JOSEPH ARCH.





he became so indignant that he rushed off home to ask his mother, "Why isn't father as good in the eyes of God as the squire?"

Had the squire heard the inquiry he would probably have concluded that the boy had the making of a revolutionist in him, and such a conclusion would have been not without reason, for young Joseph Arch, as the lad was called, was, when he grew to manhood, to be the leader in a revolt of agricultural labourers which constituted one of the most remarkable, and for the class concerned, one of the most eventful uprisings that the industrial world has yet seen.

If we look back to the early life of this young revolutionist, destined one day to take his seat in the Imperial Legislature, and ask whether he started with any special advantage, the answer is "Yes,—a good mother." His father was an excellent man, God-fearing and independent, a staunch repealer, who had the strength of his convictions and had refused to sign a petition in favour of the Corn Laws, with the result that he was boycotted by the farmers, was refused all employment for eighteen weeks, and had to see his family reduced to the verge of starvation. But it was the mother who exercised the greatest influence in forming young Joseph's character. From a social standpoint she was merely a woman of the soil,—a village-born domestic servant, who had married an

agricultural labourer. But she had a true nobility of character which well entitles her to rank high among the mothers of famous men. Shrewd, strong-willed and self-reliant, her whole life was a continuous lesson to her children to depend on themselves, and to look to no one for favours. Her husband's wages were only from nine to twelve shillings a week, and on this she kept house,—luckily without having to pay rent, inasmuch as the cottage they lived in was her husband's freehold property. When those wages failed,—and they did, for instance, in those eighteen weeks spoken of already,—she supported the whole family by doing laundry work.

But while other labourers' wives were humble and submissive to the "lady-despot" at the rectory, and accepted alike her gifts and her humiliations, Joseph Arch's mother would have none of them. She would "rather work the bones off her fingers" than see her children carry jugs of charity soup home through the streets! Food was terribly dear, and almost every man in the village was a poacher; but self-reliance and self-help were principles which the worthy woman not only preached but practised, and she did so with such persistency that they became part of Joseph Arch's second nature, and had no little influence in shaping his whole career.

At the outset there did not seem much that Joseph

could do in the way of helping himself. He had three years' schooling, getting well grounded in the elements of reading, writing, arithmetic, and mensuration, and he started as a wage-earner at the age of nine. His first employment was to spend twelve hours a day in the fields scaring away crows for the farmers, and for this he got fourpence a day. There was an increase of twopence a day when he became ploughboy, and he thought he was making real progress in life when he earned eightpence a day as a stable-boy. Then he became an expert mower, and he practised hedge-cutting so successfully that while still in his teens he earned for himself, as the result of a "national" competition, the proud title of "Champion Hedge-cutter of England."

All this time he had been buying such books as his small means would allow, his leisure being entirely devoted to study. Even as a boy he had never cared to go into the streets to play. He sat down to his books as soon as he returned home from the plough or the hedge-rows, and in this way he managed to pick up a fair education. "To make more money," he says in the story he has told of his life, "to do more, to know more, to be a somebody in my little world, was my ambition, and I toiled strenuously to attain it." Strenuous toil it was, indeed, and, what was more, it had to be carried on with a food supply

so limited that it was seldom he got a taste of fresh meat oftener than once a week. For Joseph Arch, however, this was only a matter of detail. He had made up his mind that he would master everything he took up, and that he would take up everything which would help him to get on, and so long as he had food enough to keep him in health and strength he was well satisfied.

The mother whose influence had been so invaluable to him died in 1842, when he was sixteen, and a year or two later he started off on a tour through various English counties, and also through Wales, getting good jobs at hedge-cutting. He became, in fact, a master of the crafts both of hedge-cutting and of mowing, and often worked with gangs of from twenty to twenty-five men under him. He thus returned home with money in his purse; but he also brought back some "tough facts" about the land and the labourer, and about the "inert mass of underfed, over-worked, uneducated men" who then constituted the agricultural labourer class in the counties through which he had travelled. These tough facts, together with the aspiration to do something to bring the "inert mass" out of the Slough of Despond into which it had fallen, took possession of his thoughts, but some years were to elapse before he could see his way to get beyond the stage of thinking about them.

At twenty-one he married, for someone was wanted to keep house in place of his mother, and he was then earning good money at hedging, ditching, and draining, at fencing or hurdle-making, or anything else that offered, his spare time being still given to his books. But when more mouths came to be fed more money was wanted than could be earned at Barford, and Arch started afresh on his travels, gaining good money, getting more "tough facts," and seeing still more of the "inert mass." Soon he became marked as a man alike of experience and of influence in his village, and his sturdy independence and the vigour with which he maintained his own views led him into some stiff fights with local authorities or local magnates for what he regarded as the liberty of the subject or the preservation of the freedom and independence of himself and family. Meanwhile he was waiting for a call from the "inert mass" to lead it into action, and that call came to him when he was in his forty-seventh year.

The conditions in which the agricultural labourers then found themselves were bad enough in all conscience. Their wages were at the starvation rate of twelve shillings a week; they were overworked to the same extent that they were underpaid, and they lived, as a rule, in the most wretched of hovels. Murmuring against such conditions had gone on for years, but the agricultural labourers had, up to that time, no

means of making their grievances known. They had no vote, no representative organ, no trade union of their own, and no friends and supporters among the unions of other workers. There was just one clear-brained, level-headed man who knew both their troubles and how to remedy them, and that man was Joseph Arch. He had pondered over the whole subject while cutting his hedges or putting up his fences, and he had concluded that the only possible remedy was to be found in combination, though there could be no combination until the men were ready to combine.

The day came at last when they were so ready. Trouble had arisen at Wellesbourne, where the labourers wanted more money, and on 7th February 1873 a deputation of three waited on Mr. Arch at Barford, and invited him to address a meeting at Wellesbourne the same evening. If Mr. Arch knew the proper remedy, the labourers knew that he was the proper man to apply that remedy. His knowledge of men and books, his manly and independent character, his conflicts with local potentates, and his vigorous oratory, cultivated by many years of local preaching, all marked him out as a leader of men; while the labourers recognised in him, as he says, "a fellow-labourer, with a plain-speaking tongue in his head, a heart in the right place, and goodwill towards them." To Wellesbourne, therefore, he went, and there he

addressed a meeting of labourers under a chestnut tree, the darkness being relieved by the rays of light from lanterns suspended from the tops of bean poles carried by the men. From the elevation afforded him by a small stool Mr. Arch addressed them with the vigour of a man who felt that the moment for which he had been waiting for years had come to him at last. He convinced them that in combination was their only hope; they formed a union on the spot; and they put down 200 names as a first roll of members. There was another still larger meeting a fortnight later, when the men resolved to give notice for an increase of their wages from the average twelve shillings a week to a fixed rate of sixteen. The notices were served, the increase was refused, and the men came out on strike.

So the Revolt of Hodge had fairly begun, and great was the astonishment alike of the farmers and of the country. Had any ordinary body of workers come out on strike nobody would have been surprised. But the agricultural labourer! The man whom everybody had thought incapable of standing up to assert any right or claim of any sort whatever! The worm was indeed turning at last. The farmers concerned thought they would soon stop the trouble by locking out other branches of labour which had not given notice, thus starving the whole body into surrender; and, inasmuch

as the Warwickshire men began the lock-out with funds representing five shillings' worth of coppers, the future was not promising. But before long the strike had spread into eight other counties, and the country got still more interested. Archibald Forbes was then sent to Warwickshire for the *Daily News*, and what he wrote about the agricultural labourers so stimulated public sympathy that subscriptions began to roll into the men's coffers in a most generous fashion. Soon the movement had spread all through the country, and within four months the Warwickshire Agricultural Labourers' Union had developed into a National Agricultural Labourers' Union, with some 40,000 or 50,000 members. In his capacity as chief organiser Mr. Arch travelled in all directions, addressing five or six meetings a week, and working, as he says, "like a slave"; but he worked with such moderation, and exercised so much control over the men he led, that he kept them under perfect restraint, and no disorder occurred. Many of the speakers at the meetings were Methodist local preachers, the singing of special campaign songs did much to soothe the feelings of the men, and the whole movement was characterised by a depth of religious feeling probably unsurpassed by any other industrial rising either before or since.

One effect of the strike and lock-out was, as the farmers held out against giving higher wages, to turn



the thoughts of the agricultural labourers to finding fresh homes for themselves, either by migration or by emigration; and in August 1873 Mr. Arch visited Canada to get acquainted with the resources of the Dominion as a field for emigrants of the farm labourer class. The report he brought back was so favourable that some 4000 agricultural labourers went out to Canada to settle, assisted by the National Union and by the Canadian Government, a further 2000 being helped to emigrate to Australia and New Zealand.

The effect of the agitation, begun in so modest a fashion under the chestnut tree at Wellesbourne, was to bring about, eventually, a great improvement in the industrial conditions of the British agricultural labourer. But it did more than that. It helped to call serious attention to the very unsatisfactory relationship in which many of the farmers stood in regard to the land-owners, and it paved the way for reforms which not only improved the position of the farmer, but gave him less reason for squeezing the labourer. A still further result it brought about was the enfranchisement of the agricultural labourer. Mr. Arch had agitated this subject for years. The concession was made in 1884, and with it the main purpose of the National Agricultural Labourers' Union was accomplished. The labourers had got their financial condition improved, and now they had a voice in the country they

could easily make known any other grievances. Soon, too, they had their own representative in Parliament, for Mr. Arch was returned at the General Election of November 1885 for North-West Norfolk, and, though defeated at the General Election of July 1886, he was returned again at the General Election of 1892, and continued to represent his old constituency until the General Election of 1900, when he retired. It was not a little striking that one who had begun life as a "crow-scarer," at fourpence a day, should have become the representative in the House of Commons not only of the agricultural labourers, but also of the Prince of Wales, now King of England, since the Sandringham estates are in the North-West Division of Norfolk, for which Mr. Arch sat.

The Union lingered on for some years, but its continued career was endangered both by internal dissensions and by the complications of an ill-advised sick benefit society, and by 1894 it had practically dropped out of existence.

One more honour remained for the veteran agitator, who, in the depth of his piety, took no credit to himself for what he had done, but declared that he "was but a humble instrument in the Lord's hands." His further honour was that when, in 1900, he published the story of his life, it was not only edited but provided with a most sympathetic introduction by the Countess of

Warwick. This direct association of peerage with peasantry was still another proof of the complete transformation that Mr. Arch had seen brought about in the class from which he sprang.

That an honest and pious agricultural labourer *is* as good as any village squire in the sight of God every one will now believe; but the career of Joseph Arch shows how an agricultural labourer may become a much greater person than a village squire even in the sight of the world.

## A PIONEER OF TRAVEL

**I**N the boyhood of a good many people still living the man who had made the journey through the Netherlands, the German States, Switzerland, and Italy, returning by way of Calais to England, was looked up to as one who had done "the grand tour," while any one who had gone all round the world was regarded with the veneration due to a "circumnavigator." In the present year of grace a person who crosses the Channel and goes through three or four countries in the course of a summer holiday is merely a "Continental tripper," and the one who has made the tour of the world ranks as nothing more than a "globe-trotter."

In this change of phraseology may be summed up a great change of social conditions, brought about in little more than the lifetime of a single generation. From being an aristocratic institution, possible only to those possessed of plenty of money and plenty of leisure, foreign tours have been brought well within the means of small purses and short holidays. Not merely the professional man but the artisan can make journeys at the beginning of the twentieth century

which were possible only to the moneyed and leisured classes in the middle of the nineteenth. A clerk or a carpenter possessed of a £10 note, and having a fortnight's holiday, can, for instance, make a cruise through the fjords of Norway which even a man of wealth would hardly have ventured on not so many decades ago. As for excursions and trips within the limits of the British Isles, they are offered to us in a profusion that is almost bewildering, and the annual holiday—with not a few minor trips by way of supplement—has become an established institution which only the poorest or the most stay-at-home of families would disregard.

Among those who have exercised the greatest influence in thus facilitating and popularising travel the place of honour must be given to the late Thomas Cook, founder of the famous house of Thomas Cook & Son. What Robert and William Chambers did in providing wholesome literature for the people, and what George Birkbeck did to bring scientific knowledge to the level of the artisan, that Thomas Cook did to give to all classes the opportunity of seeing their own and other countries with a maximum of convenience, and at a minimum of cost. In each case the movement in question has attained proportions far in excess of what the original leader or leaders could have foreseen; but the work done is none the less deserving of recog-

dition, while in each instance there is evidence of how great changes of world-wide importance may be produced from very modest beginnings by even the most unpretending of workers.

When Thomas Cook ran his first excursion train he could not possibly have imagined that he was starting a new era in our social history. He hit upon a brilliant idea almost by accident, and he himself was essentially a man who achieved greatness rather than one who was born to it. His early life was a severe struggle, and offered no suggestion whatever of a great success in the future.

Born in 1808, at Melbourne, Derbyshire, he lost his father when he was four years old, and his mother sought to gain means for self-support from a small book-shop. She did what she could for the lad, who, for the first ten years of his life, as he afterwards related, "had all the education that three diligent schoolmasters" could give him. But at ten he had to start to earn money, and he entered the service of a gardener in the village, his first wages being at the rate of a penny the day. A little later Thomas Cook, then a slenderly-built lad, might have been seen hawking fruit and vegetables in the market-place at Derby. But he was satisfied with neither his work nor his employer, whose habits of insobriety made his assistant even more disposed than he would otherwise

have been, in after life, to become an earnest temperance advocate. At fourteen he was placed in a turner's shop, where he became a skilled wood-turner and cabinetmaker. Industrious and persevering, the only recreation he allowed himself was that of angling in the Trent, and to indulge in this he often rose at two or three o'clock in the morning, so as not to interfere with his day's work. Leaving Melbourne he went to Leicester, where he got employment with Mr. Winks, a printer and publisher of books for the General Baptist Association; but his religious views led him to take to mission work, and in 1828 he was appointed a Bible reader and village missionary for the county of Rutland. So devoted was he to this work that in the year 1829 he travelled 2692 miles, doing 2106 on foot. He married in 1832, removed to Market Harborough, and there started in business as a wood-turner.

Becoming interested in the temperance movement, he and half a dozen friends formed a Total Abstinence Society in Market Harborough about the year 1836, and he himself was chosen as secretary. Two years later the South Midland Temperance Association was formed, and Mr. Cook again took over the duties of secretary, besides the editorship of a monthly paper, called the *Temperance Messenger*. He also brought out a "Children's Temperance Magazine," which existed

for six or seven years, and was the first of its kind.

It was this temperance movement that constituted the immediate cause of Thomas Cook becoming the originator of the railway excursion system. In those days temperance advocates had a very uphill fight, for they had not only strong prejudices to overcome but also a good deal of active opposition, which occasionally assumed the form of actual persecution. Something was wanted to make the movement more popular, and that something Mr. Cook was fortunate enough to discover.

One day, in 1841, he was walking from Market Harborough to Leicester, to attend a temperance meeting, when, to quote from an address he once gave—

“A thought suddenly flashed upon me to the effect that it would be a capital thing if we could make railways subservient to the interests of temperance. I carried the thought to the platform at Leicester, and there publicly proposed that in connection with the next delegates' meeting, to be held at Loughborough in July 1841, a special train should be engaged to take friends from Leicester to Loughborough, a distance of eleven miles, and that an attraction in the shape of a gala should be arranged for the day. The idea was greatly applauded, and



the next morning I applied to the Midland Railway authorities for a special train, the charge per passenger to be one shilling for the double journey. This was cordially agreed to, and on the day proposed 500 passengers were conveyed in twenty-four open carriages."

Doubts have been raised as to whether or not this excursion, which was run on 5th July 1841, was actually the first in the history of railways; but it is incontestable both that it was the first "publicly-advertised" excursion, and that it was the immediate cause of railway excursions becoming an established system. It produced an immense sensation at the time. The trippers were preceded to Leicester station by a band of music; a great crowd welcomed them at Market Harborough, where they had amusements, a public tea, and temperance speeches in the park of Mr. Paget; and they were welcomed back to Leicester by another crowd, which received them with all the honours due to the pioneers of a new era.

As the news spread throughout the Midlands Mr. Cook received applications from many quarters for advice as to the running of excursion trains. By this time he had removed to Leicester and started business as a printer of temperance publications. All his leisure time in the summer months was taken up by planning Sunday school and other trips to Derby,

Nottingham, Birmingham, and elsewhere in the Midlands, the number of excursionists on some of these occasions being between 4000 and 5000. In course of time he concluded that the organising of excursions might be developed into a business at once profitable to himself and useful to the community, and he resolved to devote himself to it accordingly. In 1844 he made a permanent arrangement with the Midland Railway Company to have trains placed at his disposal when they were required, he providing the passengers; and in 1845 he had a combined trip to Liverpool and North Wales, proceeding by special steamer up the Menai Straits to Carnarvon, and also combining trips to Snowdon and other parts of North Wales. This was the first "tour," as distinguished from the local excursions to which Mr. Cook had previously devoted his attention. In 1846 he personally conducted his first party of 350 to Scotland. They had to proceed from Fleetwood to Ardrossan by steamer, the railway communication being then incomplete. At Glasgow guns were fired off in honour of the pioneers, and a band of music escorted them to the Town Hall, where speeches of welcome were made. Equal cordiality was afterwards shown to them at Edinburgh, the belief being that such visits could not fail to impart greater cordiality to the relations between England and Scotland.

In 1849 Mr. Cook extended his system to Ireland; by 1850 he had made arrangements with most of the leading railway companies; and in 1851 he conveyed 150,000 persons to London to visit the Great Exhibition in Hyde Park. It was in connection with these last-named excursions that Mr. Cook organised the great temperance meeting out of which grew the London Temperance League.

By this time Mr. Cook had been joined in the business by his son, Mr. John M. Cook, under whom it was, in later years, to undergo such enormous expansion. The first Continental Circular Tour was made in July 1856, but it was not until 1863, when the Scotch railways refused to renew the previous arrangements, that Mr. Cook turned his attention seriously to the Continent as offering "almost unlimited fields" for tourist traffic. He then took his first special party to Switzerland, this being so successful that in the following November he broke fresh ground in Italy. In 1865 the head office was transferred from Leicester to London, where the son took charge, and Mr. Cook went to the United States to arrange for an extension of the tours to that country. In 1868 he took his first party to the Holy Land; in 1869 he had his first trip up the Nile; and in 1872 he and nine companions started on what he called an "exploratory tour" of the world,

his resolve being not to rest satisfied until he had organised an annual trip round the world.

Mr. Cook retired in 1878, and from that time the sole control of the business was in the hands of Mr. John M. Cook, who had become his father's partner in 1872. It is to the remarkable organising powers of Mr. John M. Cook that the great development of the firm's operations in recent years is due; but the name of Thomas Cook remains as that of the original pioneer and inspirer of a system of travel which now spreads as an intricate network over the entire surface of the globe.

During the last few years of his life Mr. Cook was afflicted with blindness, but he well maintained his vigour, and though he could no longer see he still found his chief delight in travel. On 18th July 1892 he was seized with paralysis, and he died the same night. Mr. John M. Cook died on 4th March 1899, leaving three sons to carry on the business.

From what has been already said it will be seen that the concern established by Thomas Cook was originally based on very different motives from those of merely bringing in a profit for himself. All that he sought at first was "to make railways subservient to the interests of temperance," and it was not until one or two years had elapsed that he gave up his printing business in order to devote all his time to the

organising of excursions. Even then he was not actuated by purely mercenary motives, for one of his strongest convictions was that international goodwill would be promoted if the different nations of the world were made better acquainted with one another. He thought, in fact, that travel would bring about beneficent results akin to those that the late Prince Consort expected to follow from the holding of international exhibitions. Widened knowledge and broader sympathies were to decrease the possibilities of mutual distrust and misunderstanding; the invasion of a country by personally conducted tourists or independent trippers was to reduce the probabilities of invasion by personally conducted—troops!

Since the days of Thomas Cook the world has grown less sanguine on matters of this kind, and the success of his tourist system is due less to sentimental or patriotic considerations than to its real practical utility. But from this point of view Thomas Cook deserves to be regarded as one of the benefactors of his race. He had an instinctive perception of a great public need, and he possessed the good organising power requisite to meeting that need. Taking advantage alike of the increased facilities for travel and of the growing intelligence and greater prosperity of the British public, he arranged for them a system of travel under which all arrangements were made for

them in advance, and, as far as possible, almost every want was anticipated, their actual requirements being reduced to little more than so many sets of tickets and hotel coupons. The system of personally conducted parties has, more especially, enabled many thousands of persons innocent of any language but their own to visit foreign countries with comfort and enjoyment, who otherwise would never have ventured to travel abroad. Whether the actual knowledge gained respecting those countries has been as great and beneficial as some enthusiasts are inclined to believe, may be open to doubt; but the expansion of Continental travel has certainly done much towards abolishing those insular prejudices of which one formerly heard so much; it has broadened our national sympathies, and it has opened up to us, individually, sources of keen enjoyment that have added very considerably to the sum-total of human happiness.

## CHAMBERS'S JOURNAL AND ITS STORY

THE history of *Chambers's Journal* constitutes an important factor in the literary and social development of the nineteenth century, and that history is all the more striking because it embraces also the life-history of two of the most remarkable men that even Scotland has yet produced. William and Robert Chambers belonged to a past generation, for William died in 1883, in his eighty-fourth year, and Robert in 1871, when within a little of his seventieth year. Yet we cannot but feel that they are still active forces, alike directly in the work that they themselves did, and that lives after them, and indirectly in all they inspired others to do; while the story of their trials and struggles, of the manly independence, the heroic self-denial and the dogged persistence with which they fought their way upward, until they rose from squalid poverty to prosperity and world-wide honour, is a record that will ever be fresh and stimulating to those aspirants for success in life who are prepared to face the uncertainties of the future with a brave heart and a "persistent earnestness of purpose."

Nothing could have been more unpromising than the conditions of the early life of the two brothers. The father was a cotton manufacturer at Peebles, but his business was ruined by the introduction of the power-loom, which drove out hand-loom weaving, and he, an impracticable sort of man, quite unfitted to fight the battle of life, did little for his sons besides first giving them an elementary education, and then conferring on them what he regarded as the distinct advantage—for which he afterwards expected the most practical of gratitude—of leaving them to shift for themselves. But one good thing, at least, he did which was to have an important bearing on their future career. Impracticable as he was from a business point of view, he was a man of literary tastes, and he had acquired a copy of the fourth edition of the *Encyclopædia Britannica*, concerning which William Chambers afterwards wrote: "The possession of this voluminous mass of knowledge in no small degree helped to create a taste for reading in my own and particularly my brother's mind; at all events a familiarity with the volumes of this great work is among the oldest of my recollections." "It was," said Robert, referring to the same subject in some notes on his early life, "a new world to me. What the gift of a whole toyshop would have been to most children this book was to me. I plunged into it. I roamed





ROBERT CHAMBERS.



through it like a bee. I could hardly be patient enough to read any one article while so many others remained to be looked into. What a year that was to me, not merely in intellectual enjoyment, but in mental formation! I believe it was my eleventh, for before I was twelve misfortune had taken the book from us to help in satisfying creditors. The sciences of which I obtained the first tracings through the *Encyclopædia* have all through life been endeared to me above the rest." We see here the early bent of the mind of one who, from that time forward, was to devote all his leisure to reading and to literary work, and to whom, in his nineteenth year, the impulse to composition was, as his brother wrote, to "come as an inspiration."

Domestic troubles made it necessary that William should start earning money at the age of fourteen, when he was apprenticed to a bookseller for four years, at a salary of four shillings a week. Soon after this the father got a situation as manager of some salt works between Portobello and Musselburgh, and William was left in Edinburgh to solve the problem of how to live on his income. He spent Sunday with his parents, on the coast, but otherwise he got no help from them, and he had to keep himself in Edinburgh for the remaining six days of the week on his four shillings. He managed to get a room for eighteenpence a week; he achieved a triumph in the art of cheap

living by reducing the cost of his food to one shilling and ninepence for six days, or threepence-halfpenny a day, and he had ninepence a week left for clothing and all other purposes. His principal reliance for food was on porridge and buttermilk. This he had for breakfast and supper, the porridge costing three farthings at each meal and the buttermilk one farthing. For dinner he had some broth made of a small quantity of meat and a large quantity of water, with a profusion of barley and vegetables, the daily cost thereof being three halfpence. On this scanty fare he managed to preserve health, strength, and also good spirits, for though he was often hungry he felt sure that "things would come right in the long-run." In his eagerness, also, to remedy the defects of his scanty education he rose at five in the morning to get to his books. In the winter of 1815-1816 he had an "engagement," at that early hour, to read aloud interesting books to a baker who had no time for literature, of which he was fond, but could listen to others while he made up his bread. The reward that William got for his services was a hot roll every morning.

Robert, who had been left at Peebles to continue his education, joined William at Edinburgh, where he made various unsuccessful attempts to obtain situations. A student in all his tastes and ways, he had acquired a good knowledge of Latin, had an insatiable desire for

learning, and knew no recreation but that of exploring old Edinburgh, and acquiring facts and legendary stories which were to be of the greatest service to him in his writings in after years. If the privations endured by William were bad enough, in his attempts to live on four shillings a week, those of Robert were still worse, inasmuch as he could not earn even as much as that; but the brothers had resolved to ask no one for help, and to exercise the last degree of self-denial. In the *Memoir* written by William Chambers there is a touching picture of Robert seated by the few embers which constituted the fire in their landlady's kitchen, studying Horace by the scanty light, and conning over his dictionary,—thus finding relief in the pages of the Latin poet from the grim and apparently hopeless realities of his own situation.

Yet just one ray of hope was thrown on that situation when William suggested, almost as a last resource, that Robert should get together all the school and other books which he either possessed or could collect from the family, and start as a second-hand bookseller. The fireside student acted on the suggestion, taking a small shop in Leith Walk, for which £6 a year rental was asked, and there displaying the volumes he had got together. William went to live with him at this shop, where the first night they had no bed, but lay on the floor, with a rug for covering and a bundle of books

for a pillow. They improved on this the next night by procuring a bed stuffed with chaff, and sleeping on that.

Robert was thus started in "business," and he managed to struggle along. In May 1819 William's apprenticeship came to an end, and he found himself, in his nineteenth year, with a capital of five shillings and the world before him. With a view to following Robert's example, he rented another shop in Leith Walk, for which he was to pay £10 a year, and a bookseller's agent from London, whose acquaintance he made by helping him at a "trade" dinner, let him have, on credit, £10 worth of cheap reprints of standard works, then a new feature in the bookselling business. With his five shillings ready cash he bought wood for trestles on which to display the books outside the shop, and he was distinctly encouraged by taking nine shillings and threepence the first day. As the business improved he obtained fresh stock, and in six months the most critical part of the struggle was over; though for years after he limited the cost of his own living to sixpence a day. Having in his leisure time in the shop written an account of David Ritchie, the original of the *Black Dwarf*, and had it printed, the idea occurred to him of doing printing work himself, and he bought for £3 a rickety old press, and some type more or less worn out. With this press and type he resolved to produce a pocket edition of the songs of Burns.

He taught himself the art of setting type, he worked off the impression on his "jangling, creaking, wheezing little press," as he called it, printing 750 copies after some months' labour, and he sold them at a profit of £9. He then bought some more type, cut a variety of letters in wood with a chisel and a penknife, and scored a financial success by selling hundreds of copies of a placard bearing the words "To Let." Then he got orders for printing Friendly Society rules, pawn-tickets and other things, and he devoted the proceeds to buying a fount of longprimer type for pamphlet work, using it first for an account of the Scottish Gipsies, which he wrote himself and published at a profit of a few pounds. In conjunction with his brother, who had devoted to literary composition the leisure left to him by his own bookselling business, he started a small periodical called *The Kaleidoscope*, Robert writing nearly all the articles, while William did all the printing and publishing, working at it for sixteen hours a day. The venture was not carried on long, however, as it only paid expenses.

The brothers did far better on the occasion of the visit of George IV. to Edinburgh in 1828, when William got quite a windfall through printing broadsides, songs, and programmes; while Robert, who was a clever penman, did well at writing addresses to the King for public bodies. Each then

removed to larger premises. A book written by Robert (who was showing distinct skill in authorship), entitled *Illustrations of the Author of Waverley*, was put into type, printed, bound, and sold by William, and was very remunerative. Robert next wrote *Traditions of Edinburgh*, which was also a distinct success, and was the means of introducing him to some of the leading men of Edinburgh. A number of other works followed, with the result that a decidedly beneficial change was brought about in the circumstances of the two brothers, each of whom found himself at last in a fairly flourishing condition.

Towards the end of 1831 William Chambers resolved upon an entirely new departure. A number of cheap serials "of a worthless or at least ephemeral kind," had come into existence in response to what seemed to be a public demand, and with these William Chambers had to deal in the course of business. "They consisted," he says in his *Memoir*, "for the most part of disjointed and unauthorised extracts from books, clippings from floating literature, old stories, and stale jocularities. With no purpose but to furnish temporary amusement, they were, as it appeared to me, the perversion of what, if rightly conducted, might become a powerful engine of social improvement. Pondering on this idea, I resolved to take advantage of the evidently growing taste for cheap literature, and lead



it, as far as was in my power, in a proper direction." In other words, he aimed at supplying to the "universal appetite for instruction . . . food of the best kind, in such form and at such price as must suit the convenience of every man in the British Dominions."

So on 4th February 1832 the first number of *Chambers's Edinburgh Journal* was published by William Chambers as a speculation of his own. It secured at once a success exceeding his most sanguine expectations. No fewer than 50,000 copies were sold not only of this number but of those that followed, and at this figure the circulation remained until some years after, when it rose to 80,000 copies. Before many weeks had gone by the brothers had joined in partnership as "W. & R. Chambers," large premises had been taken, and the available machinery scarcely sufficed to produce all the copies of the *Journal* demanded by the public.

The popularity of the *Journal* was not only immediate and great, but widespread and lasting. The permanent hold thus secured on the public mind was attributed by William Chambers as due in a great degree to the essays—moral, familiar, and humorous—written by Robert Chambers, who was a contributor from the first. The one object, too, never lost sight of, was "not merely to enlighten by presenting information on matters of interest, and to harmlessly amuse,

but to touch the heart,—to purify the affections.” The brothers sought, in fact, “to cultivate the feelings as much as the understanding,” and how well that aim has been appreciated is shown by the popularity which the *Journal* has had ever since.

Of the further fortunes and literary ventures of the firm of W. & R. Chambers, now put on so solid and prosperous a foundation, of the honours paid to them, and of the further good works they did, there is no need to speak in detail. The movement for cheap and wholesome literature which they had pioneered with *Chambers's Journal* was followed up with *Chambers's Information for the People*, *Chambers's Educational Course*, *Chambers's Encyclopædia*, *Chambers's Book of Days*, and many other works besides. The brothers, however, in spite of all their success, still led lives of arduous and unremitting labour. “Week after week, year after year,” writes William Chambers, in a passage with which this sketch may be appropriately concluded, “there was with us, I may safely aver, no relaxation of vigilance—no treating of serious duties in the light of an amusement to be taken up and laid down at pleasure. And, need I make the remark after all that has been written, first and last, on the subject, that without this persistent earnestness of purpose, and, it may be self-denial, no permanent success can be recorded in any undertaking, whether literary or commercial?”





JAMES GORDON BENNETT.

## JAMES GORDON BENNETT

**O**F few, if any, of the world's great newspapers can a more romantic story be told than of the *New York Herald*.

Its founder, James Gordon Bennett, father of the present owner, was a native of Keith, Scotland. He went to school up to his fifteenth year, when he was sent to a Roman Catholic seminary at Aberdeen to be prepared for the priesthood. That was the destiny which his parents designed for him, and for some time he followed the usual college course. But there was developed in his mind a spirit of independence and self-will which rendered intolerable to him the idea of any such check on his freedom of thought and action as entrance into the Roman Catholic Church would involve; while, coupled with these feelings, a romantic spirit was aroused in him as the result, partly of his devotion to the works of Byron and Scott, and partly of his visits to places rendered famous in Scottish history. Inclined to rebel against authority in any shape or form, and resolved to seek his fortune under conditions where he would be his own master, he

abandoned his college life, and set out for America in 1819, when he was in his twenty-fourth year. He landed at Halifax, Nova Scotia, and attempted to earn a living by teaching bookkeeping. Failing in that he made his way to Boston. There his means soon came to an end, and he actually spent two days without food until the chance discovery of 25 cents on the common enabled him to get a meal. Happily he secured employment with a firm of book publishers, first as shop assistant, and then as proof-reader.

At the end of two years he went to New York, was afterwards engaged by the editor of the *Charleston Courier* as his assistant, and stayed with him for a year, getting a good insight into the routine of newspaper work. Returning to New York, he tried to open a school, but could not get enough pupils. He then proposed to lecture on political economy, but failed again. He next devoted his energies to contributing paragraphs, reports, articles, poetry, and smart, lively items to the New York papers. It was laborious and poorly paid work; but he possessed in a pre-eminent degree the Scottish quality of thrift, and he had no idea of wasting either money or energy on amusements or self-indulgence. Thus he plodded steadily on, working hard, availing himself of every opportunity for advancement, and preserving that spirit of independence and self-reliance which had impelled him to

leave Scotland and cross the ocean in order to make his way in the world.

Bennett first became a newspaper proprietor in 1825, when he bought the *New York Sunday Courier* on credit; but he soon gave it up, and got engagements on several other papers in succession. In 1828 he went to Washington as correspondent for the *Enquirer*, and the bright, gossipy articles he wrote, full of personalities and caustic touches, were a great success, and a foretaste, also, of a style which later on was to contribute substantially to the success of the *New York Herald*. His second venture in newspaper ownership was when he started, at Washington, a cheap party paper called *The Globe*, which lasted thirty days. Then he made a third attempt, bringing out a Jackson organ, called *The Pennsylvanian*; but the Jackson party would not support it, and this paper also was a failure. Thereupon Bennett resolved to depend no more upon politicians, but to see what he could do in the way of producing an organ on strictly independent lines, without asking for support from any party whatever.

His scheme was a distinct innovation in New York journalism, and it was the more hazardous because Bennett had already experienced three failures, and possessed only very limited means with which to avoid a fourth. Everything, therefore, had to be done with the strictest view to economy. The "offices" he took

consisted of a cellar in Wall Street, and the furniture comprised one chair and a table formed by a piece of board supported by four flour barrels. The cellar was alike editor's room and publishing office, and the various functions of editor, reporter, advertisement canvasser, and publisher were all discharged by one and the same person, namely, James Gordon Bennett. The only thing he did not do for the paper was to print it. For this he relied on two young printers, named Anderson and Smith, who, after much pressing, consented to do the work and share the profits or the losses, as the case might be.

These, then, were the conditions under which the *New York Herald*—or the *Morning Herald*, as it was then called—made its first appearance on 6th May 1835, the proprietor having then sufficient money in his pocket to pay for the cost of only about ten issues. Such an attempt as this to woo Dame Fortune can hardly be surpassed in the whole history of journalism. With no financial or political support, with not even an errand boy to help him, James Gordon Bennett sat down on his solitary chair, in an obscure cellar, to write, on his flour-barrel desk, the entire contents of a print of four pages (each of which consisted of four small columns), with absolutely nothing to rely on but his own energy, his own talent, and his own perseverance. With these qualities he would conquer the world—if he could!

And conquer the world, more or less, he certainly



did. His unpretending sheet secured immediate popularity. If, at first, Mr. Bennett was indebted to his imagination for many of his facts, he took good care to make those facts interesting; but he certainly did not rely on his recollection for his jests, his abundant stores of merciless wit and cynicism being poured out on local celebrities in a way that offended his victims, shocked their friends, but—made everybody want to see the paper! The *Herald* showed great smartness, and it produced a good deal of gossip which could not, perhaps, be regarded as high-class journalism. It was, however, far from being the founder's idea to depend on either smart writing or the talk of the city. He believed his greatest chance would be in providing his readers with actual news, of which the American journals published up to that time had made a very poor show. It was on its news more than anything else that the success of the *Herald* was to depend.

On 13th June 1835 Mr. Bennett introduced into his paper what no other journal had yet given, namely, a money article, and this was regarded as a decidedly attractive feature. But disaster came in the following month, when the printing-office was burned down, and Messrs. Anderson and Smith announced that they would have no more to do with the enterprise. Such was Mr. Bennett's energy, however, that within little more than a fortnight he had started afresh, this time

as sole proprietor. His working-day at this period was from sixteen to seventeen hours, and how he endured the strain is a marvel. The success of the *Herald*, which soon attained to a circulation of 7000 a day, enabled him to get some assistance, but there was no relaxing in his own energy. In March 1836 he enlarged the paper. In announcing the fact, he said: "I began the *Herald* last year without capital and without friends. Everybody laughed and jeered at the idea of my succeeding. By effort, economy, and determination I have got a firm footing, mastered all opposition, and begin this day a new movement in newspaper enterprise which will astonish some persons before I have completed it." Two years later he had his regular correspondents in the European capitals, as well as in the chief towns of the United States. Many other new features he introduced in addition, while his organisation of the system, unknown up to then, of having the paper distributed by newsboys, added greatly to the circulation. By 1841 the *Herald* had made such headway that the income was estimated at 100,000 dollars. In the Civil War Mr. Bennett had no fewer than sixty-three war correspondents at work, and this is a fair sample of the energy and enterprise with which, prior to his death in 1872, he had raised into one of the greatest papers in America the journal of which he had published the first number in a New

York cellar. How his son and successor, the Mr. James Gordon Bennett of to-day, showed this same energy by fitting out the Jeannette Polar expedition, by sending Stanley in search of Livingstone, and in various other ways, is known to all the world.

It has been well said of the founder of the *New York Herald* that "he had no vices," and certain it is that if he had had any in the days of his early struggles he could not possibly have gone through what he did. He was resolved to succeed, and he allowed neither difficulty nor temptation to turn him from his purpose. By keeping a sound mind in a sound body he was able to endure a physical strain under which any man who had given way to self-indulgence in any shape or form must have broken down.

In an early issue of the *Herald* Mr. Bennett wrote concerning himself: "I eat and drink to live—not live to eat and drink. Social glasses of wine are my aversion, public dinners are my abomination, all species of gormandising my utter scorn and contempt. When I am hungry I eat; when thirsty I drink. Wine or viands taken by society, or to stimulate conversation, tend only to dissipation, indolence, and death."

It was by such principles as these that the founder of the *New York Herald* was able to practise, without injury to his health, that enormous industry to which the great success of his enterprise was primarily due.

## BRITISH WORKMAN AND COLONIAL PREMIER

**A**MONG the immigrants who landed at Port Jackson from the barque *Strathfieldsaye* on 27th July 1839 was a young ivory-worker from Birmingham who had made up his mind to seek in New South Wales the fortune he had found it impossible to obtain in England. His wife was with him, and she carried a child which had been born to her when the *Strathfieldsaye* was off Cape Howe. They had come out in a bounty-ship,—that is to say, a ship whose captain was paid a bounty by the Colonial Government for every desirable immigrant brought by him; and they landed in such a state of destitution that when the husband and father picked up a sixpence in the streets of Sydney he hailed it as quite a godsend.

Such was the advent into New South Wales of Sir Henry Parkes, G.C.M.G., who before his death on 27th April 1896 was to be five times Premier of that Colony, and was to rank, in the words of *The Times*, as “the most commanding figure in Australian politics.”

Born at Stoneleigh, Warwickshire, in 1815, he had to start earning his own living at the age of eight years, owing to some misfortunes that overtook his parents, and his early life was worse than that of a dog. He gave the world an insight into it when, in 1889, just after he had been reading Mr. G. W. E. Russell's *Life of Mr. Gladstone*, he said in reference to that book: "I was thinking when reading it of a comparison between Mr. Gladstone's life and my own. When he was at Eton, preparing himself for Oxford, enjoying all the advantages of a good education, with plenty of money, and being trained in every way for his future position as a statesman, I was working on a rope-walk at fourpence a day, and suffered such cruel treatment that I was knocked down with a crowbar, and did not recover my senses for half an hour. From the rope-walk I went to labour in a brickfield, where I was again brutally used; and when Mr. Gladstone was at Oxford I was breaking stones on the Queen's highway, with hardly enough clothing to protect me from the cold." Brought up under these conditions, he had had the most meagre of schooling, but he possessed throughout life an ardent thirst for knowledge. He read every book that came within his reach, and he had the habit, also, of thinking about what he read. Settling in Birmingham he acquired the art of a turner in ivory and bone, and followed up that trade for a time. But

the Colonies seemed to offer better prospects, and, securing a bounty passage, he set off with his wife to see if Australia would treat him more kindly than England had done.

He was then a tall, strongly-built young fellow of four-and-twenty, possessed of a big head and a thoughtful face—a man of distinctly superior qualities to the ordinary run of immigrants. His inadequate schooling and his struggles with poverty notwithstanding, he took with him to Sydney a small collection of his own verses, some of which he had composed so far back as 1834. These, and other verses besides, were to be published later on. For the time being he found himself face to face with the sternest of prose,—the problem, namely, of how he was to support himself, wife, and child. At first he wandered about Sydney for several days without any chance of employment offering itself. Then he became a labourer on a farm, where he washed the sheep in readiness for the shearing, and did other such work. Next he entered the service of an ironmonger, and after that he was a tide-waiter in the department of the Customs,—anything, in fact, that would give him the means of earning a living. Then, as soon as he had saved sufficient money, he bought a lathe, and opened a small shop in Sydney, where he made and sold all sorts of fancy things in ivory and bone.

So, in time, he worked himself into a fairly good position, and he also won not only the good opinion but the personal esteem of those around. He had caught somewhat the contagion of the Chartist movement, which was raging when he left England. He took with him to Sydney a strong sympathy with political reform, social progress, and working-class advancement; and this, coupled with a vigorous style of speaking and great earnestness and activity as a worker, soon made him a man of mark. His first appearance in the domain of political agitation in Sydney was in 1848, when he took part in the election of Mr. Robert Lowe (afterwards Lord Sherbrooke) to the Legislative Council. On that occasion a neighbouring tradesman said to him, as related by Mr. C. E. Lyne, in his *Life*, "Well, Mr. Parkes, we must put you up for Councillor"; whereupon Mr. Parkes replied, "If I put up for anything it will be something higher than Councillor."

In various contributions to the press Mr. Parkes had shown that he could write as vigorously and as fearlessly as he could speak, and some friends helped him to start, in December 1849, the *Empire* newspaper, to which he now devoted his energies. Politically the paper was a great success, and, alike as a public speaker and as proprietor and editor of an influential journal, Mr. Parkes became a man of con-

siderable importance, the rôle in which he specially distinguished himself being that of an advocate of the rights and interests of the people. He was first elected a member of the Legislative Council in 1854, and on the concession of responsible government to the Colony he became, in 1856, a member of the first Legislative Assembly. His reputation as a public man was not a little increased by his untiring industry, and by a perseverance which was spoken of as "above all praise." He was pointed to, also, as "an example of what may be done by a man of talent and energy relying solely upon his own exertions."

All this was very gratifying, but there was a dark side to the picture. The people of Sydney admired the *Empire*, and took it in, but they omitted to pay their subscriptions. They read its articles and its news, but did not send in enough advertisements. So the paper became a political power in the land but a financial loss to its proprietor. When the liabilities amounted to £50,000 Mr. Parkes stopped, and the last issue of the Sydney *Empire* was that of 28th August 1858. Thenceforward he left the business of journalism alone, and kept to politics for practically the remainder of his life.

Into the details of Mr. Parkes' political career there is no need for us to enter. Suffice it to say that he became Colonial Secretary in 1866; took a prominent



part in the passing, in that year, of the Public Schools Act, which brought the Council of Education into existence; became president of that Council; distinguished himself as an advocate of social reform; first became Prime Minister in 1872; received the honour of knighthood in 1877; was an early and most vigorous champion of Federation; and finally resigned office in 1891, having six times occupied the position of a Minister of the Crown, including five occasions on which he had been Prime Minister of New South Wales.

So far all this looks like brilliant success. But it was a case of the *Empire* newspaper over again, though in a much more serious form. The political triumphs had a background of pecuniary anxieties which not only became worse than those already experienced, but reduced the five-times Premier of the oldest colony in Australia to a condition of grinding poverty, and even of absolute want. Financial worries had beset him all his life. His newspaper, as we have seen, was a failure. He had started, in 1870, a general merchant's business, but that failed also, with liabilities amounting to £32,000. He had his official salaries, when in office, but they carried no pension, and with the cool shades of Opposition came a virtual cessation of supplies. When he finally left office, in 1891, he told a friend that he had scarcely £10 to his credit, and he

had sold some of his household goods "to get bread," for he had "the butcher and the baker to pay, and mouths to feed." There had been proposals from time to time on the part both of citizens and of members of the Legislature to provide him with funds; but his sturdy independence caused him to reject them. In 1887, however, a subscription was raised which should have brought him in £540 a year; but the amount dwindled to £212 a year, and this, when he had no official salary, was all he could depend on for the support of himself, family, and dependent relatives, and for paying off his accumulation of debts.

"How strange it is," he once said, "that I should occupy the position I do, and be so poor as to be compelled to receive presents from my friends." He had risen to be "the most commanding figure in Australian politics"; he had given the Colony a Public Schools Act, a Railways Act, a Public Works Act, and other measures of first magnitude; he had been five times Premier; yet in the last six months of his life he became so destitute that it was only by selling off most of his books and furniture that he could get the bare necessaries of life. There was no money in the house; the tradesmen were threatening that they would supply no more bread, or meat, or milk, unless they were paid for what they had supplied already; and there was one merciless creditor who had

taken the initial steps for seizing what was left of the furniture.

Under the pressure of all this trouble the spirit of the manly and independent old politician, who had often enough before refused help when it was offered, and had disdained to avail himself of official opportunities for his own enrichment, so far gave way as to *ask* for a grant from Parliament. "Now," wrote the veteran of eighty, "I am compelled to look for something of the kind. I cannot throw myself into new employment. I am too old."

This was towards the end of 1895. He assumed that the grant would be made, and he looked forward, not only to a few more years of life in conditions of comparative comfort, but even to paying another visit to England. There were others, however, who assumed that the grant would certainly be opposed in the Colonial Parliament. He had had detractors all his life, and there was no lack of them now, especially as he had just carried on a vigorous though unsuccessful electoral campaign against the head of the Government in the elections of September 1895. Opposition to the grant would mean a prolongation of the Session, just on the point of concluding,—and so the proposal was not made.

The impoverished octogenarian had thus to abandon his day-dream, and grind along in his poverty as best

he could. He had still abundant energy, for he appeared in two more election contests,—from one of which he retired, while in the other he was defeated,—and he shocked public feeling by taking a third wife only a very short time indeed after the death of his second, whom Sydney society had persistently refused to “receive.” But the end was now rapidly approaching. He was taken ill on 18th April 1896, and so abject was the state of poverty into which he had drifted that the Government had to provide him with ordinary sickroom comforts, and his family with food. He had himself declared that if he did not get the grant he had asked for, he would have to go to the workhouse. Happily he was spared this last indignity. All that was possible was done for him now ; but though, under better conditions, he might have lived for a few more years, the kindly assistance came too late, and on 27th April 1896 a life memorable in Colonial history, though not free from the faults and frailties that afflict mankind, was brought to a close.

Since his death the popular appreciation in Australia of the services rendered by Sir Henry Parkes has greatly increased. He is now widely spoken of as “the Father of Federation,” and the success of that movement, which has led to the creation of the Australian Commonwealth, to the tour of the Duke and Duchess of Cornwall, and to the strengthening

of the ties between the Mother Country and her Colonies, has recalled how earnestly Sir Henry advocated Federation, both in and out of season, at a time when his views were regarded as those of a mere visionary. He was a man who, in this respect at least, was years in advance of his time; but his aspirations in regard to the future of Australia are now seen to have been essentially practical and essentially statesmanlike. One may hope, therefore, that with the softening influences of time his own shortcomings and the personal animosities he had aroused will alike be forgotten, and that both Australia and the Empire at large will remember only the zeal he showed, and the rôle he played, in the promotion of their common interests.

## A PASTORALIST MILLIONAIRE

**M**R. JAMES TYSON, the Australian bushman, cattle king, and landowner, who died in Queensland on 3rd December 1898, leaving behind him estate valued at £5,000,000, occupied a position that was absolutely unique among the world's millionaires. There had not been one like him before, and even Colonial conditions are not likely to give rise to another Tyson. He did not represent a type, he represented only—himself. He had joined in the pursuit of wealth not so much because he longed for wealth as because he enjoyed the sport of getting it. He has been accused of being a miser; but a miser would have known what he was worth, and Tyson once confessed during the hearing of a case in which he gave evidence that he did not even know how many stations he owned. In a strictly unostentatious way he was capable of generosity, and he would give handsome cheques when he was not worried too much for them, or when he might depend on his gifts not being talked about, so that he could avoid the publicity he hated. But

he wasted no money on pleasures or self-indulgence.

He was a teetotaller and a non-smoker, he was almost an ascetic in his diet, and he held that life was much too serious a business for any portion of it to be devoted to amusement. But he was actuated by indifference towards such things rather than by a mere miserly desire to save their cost. He had laid the foundation of his wealth by being frugal, and when he acquired wealth he did not care to abandon his frugality. The habits of his youth continued to be the habits of his middle life and of his old age. He was brought up a bushman, and a bushman he remained. A visitor who arrived at one of his stations in the evening found him stretched under a tree. Tyson received him hospitably, and provided him with a room, but then went back to pass the night under the tree, preferring the fresh air. To dress he was absolutely indifferent. He had never worn a white shirt or a pair of gloves in his life; the "chain" which he provided for his silver watch was a boot-lace, and in the suit of ready-made, ill-fitting clothes in which he paid surprise visits to his stations in three different Colonies he looked more like a rough-rider than a millionaire. Of "collar and cuff office-men," as he called them, he would speak only in terms of contempt. Collars

and cuffs were luxuries, and luxuries of any kind he could not tolerate. Once he was going through a list of supplies wanted for a station, and he came to the entry "starch." "What is starch?" he asked, and, on being told, he said, "Ah, I see, a luxury. Strike it out." It was struck out; but then he thought a moment, and added, "Perhaps we had better let them have the starch; the wife may want it for the petticoats." Against the small economies he practised may be set the fact that during the great financial strain of 1893 he took up £250,000 of Treasury Bills in order to assist the Queensland Government; while on another occasion he offered to lend the Colony half a million sterling for the construction of a trans-continental railway to the Gulf of Carpentaria.

Shy and retiring, Mr. Tyson never courted popularity, and he was unknown except to a small circle. Though seldom complimentary in his speech, no one had ever heard a profane word fall from his lips. Any man on any of his stations—where neither alcoholic liquor nor card-playing was allowed—who used bad language was at once discharged. He had a stern sense alike of propriety, of duty, and of justice; he did harder work and had scantier fare than probably any person in his employment, and he lived a life of purity and simplicity which, it has well been said, "disarmed those inclined to covet his riches."



As for his own view of those riches, he attached so little value to wealth for wealth's sake that he did not even make a will. He would not squander or waste a single sixpence, because that would have been contrary to his habits and principles, and he was the last man in the world to give money away for the purpose of being thought generous; but he would not trouble to say how his millions should be disposed of. His attitude towards his money was the same as his attitude towards personal pleasures and comforts,—one of indifference. "I shall just leave it behind me when I go," he used to say. "I shall have done with it then, and it will not concern me after. The money is nothing. It was the little game that was the fun!"

And when James Tyson began to talk of the "little game" he had played in life he waxed far more eloquent than on those rare occasions when he could be induced to talk about his wealth. Modest and unassuming to a degree, there was just one thing of which he was proud, and that was the good he had done in reclaiming the country from natural unproductiveness. Compared with this the fact of his being a millionaire was an insignificant matter of detail. "That has been my work!" he would say. "I have been fighting the desert all my life, and I have won! I have put water where there was no water, and beef

where there was no beef. I have put fences where there were no fences, and roads where there were no roads. Nothing can undo what I have done, and millions will be happier for it when I am dead and forgotten."

It is from this point of view that the career of Tyson must be regarded; and, having thus shown that he was something more than the "miser millionaire" which those who failed to understand his character have described him as being, it may be of interest to give some details as to what his career really was, and how he accumulated the millions which he thought of less account than the "little game" that led to his gathering them in.

Born on 11th April 1823, James Tyson was the son of William Tyson, a member of an old Cumberland family who went out to Sydney in 1818, in company with Mr. Commissioner Bigge, sent there to inquire into certain charges against Governor Macquarie. William Tyson remained in Australia, taking a farm at Cow Pasture, near Camden, where James Tyson was born. At the age of seventeen James began to earn his living as a mower, rising speedily to the position of leading scythe, and saving £60 during the two years and a half he kept to that employment. He then went as storekeeper on a cattle station in the Riverina district, far remote from any white settlement, and of this period of his life he

once gave to a correspondent of the *Queenslander* the following account:—

“When a young man I was working for ten shillings per week. I had to work hard, too. I went to look after a lot of cattle that had just been bought, and it took months and months of hard riding and constant watching before I could get them to settle down. I lived in a humpy by myself, and, as the blacks were not to be trusted, I had a shelter, poor as it was, and had to camp out where they could not find me. Often of an evening, after being in the saddle all day long, I would, as I rode home, strike the fresh tracks of a mob of cattle that had crossed the boundary since I had passed there in the morning. There was nothing for it but to get back to my camp, catch a fresh horse, roll up my blanket, and shove a handful of wheat in my pocket, if I had no ground flour, for at that time a man had to grind his own wheat if he wanted flour. So I used to carry a handful or so of the raw material, and chew it as I rode back to where I had seen the fresh traces, and camp there all night. If in luck I might get a 'possum, and roast him on the coals for supper. If not I ate the wheat, lay down till daylight, and then followed the tracks till I found the mob, and brought it back. Perhaps it would take all day long, and, bar a mouthful of wheat and a drink of water, I would have nothing to eat till I returned to my hut

at night; and all this for ten shillings a week. Yet I managed to save money."

He managed, in fact, to save a further £36 during the eighteen months he remained at the station, and with the £96 he now possessed he hoped to set up with his brother a cattle station of their own. But the original £60 was lost through a bank failure, and he had to take another situation and begin saving again. At length he had a capital of £100, and he and William Tyson then started a cattle run on the Billybong River, far away in what were then the backwoods of New South Wales.

But another trial was in store for them. A severe drought killed off their cattle within a year, and James Tyson found he had only a single shilling left in his pocket. Remembering that Sir John Hay, for whom he had driven cattle some years previously, owed him £5, he started off with his shilling and a parcel of food to tramp 200 miles to the place on the Murray River where he thought Sir John might be found. His food supply did not last long, and until he got some more at a cottage he passed he had to content himself with chewing some blades of sweet grass which he plucked. Following up the Billybong he finally reached the Murray River, but failed to find Sir John Hay. He then paid his shilling to a ferryman to take him across the river, and turned

homewards along the other side of the stream with some cattle of which he took charge on the understanding that he was to have one-third of their increase in value during the time they were under his control. On his way back, however, he met his brother William, who told him that he had sold the station for £12. With this capital they started afresh, in July 1846, on a run at the junction of the Lachlan and Murrumbidgee Rivers.

Here, right on the outskirts of civilisation, the two pioneers got together more and more cattle, awaiting any further opening that might present itself. That opening came with the outbreak of the gold fever at Bathurst, in 1851, though by that time the brothers had dissolved partnership. James foresaw that the diggers who were rushing there from all quarters would be badly off for food supplies, and he invested every penny of his savings in cattle, which he took to the diggings and disposed of to the diggers at a very substantial profit. No sooner had the diggers made a rush to a new district than Tyson followed with a herd of cattle, and when he had sold out he went up country to meet other dealers who were bringing in supplies, bought up their stock for cash, took the cattle on, and made further substantial profits. In this way he laid the foundation of his fortune. He made still more money by establishing a wholesale

and retail butchering business at Bendigo, and he found a most profitable investment for his accumulated means by purchasing extensive grazing properties in quarters which he thought would one day carry a substantial population. He bought up station after station in New South Wales, he acquired the famous Heyfield estate in Gippsland, Victoria, and then, extending his operations northwards, he took up large areas in Queensland. The last-mentioned were mostly pastoral lands on the Darling Downs and the Warrego River, but he also secured considerable blocks of sugar country. This method of investment for his ever-increasing wealth he consistently followed, until he became the largest if not also the richest landowner in the whole of Australia.

While he was thus adding to his own fortune Mr. Tyson was doing a valuable work in developing the pastoral industry of the Colonies, and, indirectly, his fortune assisted in settling and supporting thousands of families in what were previously more or less non-settled districts. This is where the "little game" of which Mr. Tyson was so proud came in, and the fact of his having done so much towards the development of the resources of three Colonies during his life may be offered as an extenuating circumstance for his omission to bequeath any of his money for charities or public works on his death.

The vastness of Mr. Tyson's operations is indicated somewhat by the fact that on one station alone—Tiniboora—he had at one time 98,000 cattle; while he told a friend in Melbourne a few years ago that that year he hoped to make a record in the clip of his wool, by sending off 10,000 bales. Wool was then worth £10 a bale. One would suppose that with all these properties and all this business to look after he must have kept a large staff of accountants and clerks. In point of fact he had none at all. He had good overseers and managers, whom he was accustomed to "break in" (as he termed it) when they were boys, so that he could thoroughly trust them. But the management of his business he retained not merely in his own hands but even in his own head, for it is declared that he did not keep any books. He had an insurmountable reluctance to letting anybody know more about his private concerns than he could possibly help, and he preferred to manage everything in his own way. Yet his affairs were always well regulated and well under control, and it is said that he rarely made a mistake, one of his rules in life being never to touch any business he did not understand. He had to travel immense distances to look after his stations, and there was a vast amount of work for him to get through, but he showed no lack of energy so long as health and strength were left to him, rising at

four o'clock in the morning in his old age just as he had done in his youth.

One of his peculiarities in travelling was to assume the name of "Smith," because, as he said, he "liked to go through the world quietly, never making a ripple on the surface." Curiously enough, too, he not only called himself Smith, but almost everybody else as well by that same name. In an unusually confidential mood he said one day to a friend in Melbourne, "Do you know how much I have locked up in the reconstructed banks, Mr. Smith?" "My name's not Smith," was the reply; "but how much?" "Well, Mr. Smith, one million and sixty thousand pounds." When he did not call a person "Mr. Smith" he just contented himself with plain "Mister."

"What did you say, Mister?" was a frequent query on his part, especially in his later days, when he suffered from deafness. To much talking he was not at all inclined, and though he attended pretty regularly for a few sessions the sittings of the Queensland Legislative Council, he made only a single speech. He had been pressed by his friends to say something on the Marsupials Bill, giving the results of his great experience of up-country life, and he favoured the House with a disquisition on the nesting habits of kangaroo-rats and paddy-melons. But the reporters employed on Hansard had, presumably, never been up-country,



or had never studied marsupials, for in their lamentable ignorance they so mixed up the kangaroo-rats and the paddy-melons that Mr. Tyson was completely disgusted, and never addressed the House again. "It was my only speech," he said, with a pathos which would have melted the hearts even of those illiterate reporters, "and they *spoiled* it!"

Mr. Tyson was never married, but he was not the woman-hater that some of the newspapers have represented. He even believed that married life was an excellent institution—for other people. "Women, they say, you hate," an interviewer once remarked to him, "and that you won't employ married men?" "On the contrary," Tyson replied, "most of my managers are married, and I believe in it for them. Once a man is married his wife will take care that he stays at home, which is all the better for me." His own life, too, had not been without its romance, and though the incident occurred when he was twenty-three, namely, in the course of that 200-mile walk of his to find Sir John Hay, he recalled it fifty years after with a vividness which showed how deep an impression it had made on his mind. What the romance was cannot be better told than in the words of an article in *The Times* of 12th December 1898:—

"He had crossed the range, and, being weak with hunger, had begun to fear what the ordinary man

might have feared from the beginning, namely, that he might never find the house of Sir John Hay, when he perceived a cottage, and an old man about to enter. He approached, wishing to ask his way, but hesitating in consequence of a shyness of habit which throughout his life caused him to shun intercourse with strangers. As he reluctantly drew near the door a young woman came suddenly out—‘a beautiful, young, bush-reared girl, dark, rosy, and well grown.’ He told her that he had wished to ask his way. She looked at him, and, without answering his question, bade him come in and eat. He refused. She then laid both hands on his arm, and, with gentle compulsion, drew him in, saying, ‘You are hungry; come in and eat.’ Being ‘well-nigh famished,’ and supposing that she ‘saw the truth in his face,’ he let himself do as she bid. She called to her sister to get some food ready, and in a few minutes he was sitting before a good breakfast. He was not in all more than fifteen minutes in the house, he never spoke to the girl again, but for twenty years he continued to visit the neighbourhood and inquire after her until he learned that she was married. Then he thought it was time to discontinue his visits. His shyness, he explained, in telling the story, kept him from seeking to speak to her again, but, he added, ‘She was the only woman I ever thought of marrying.’”

One who could cherish such a perfect little idyll as this in his memory for the space of fifty years was not to be put down as a woman-hater!

He had his day-dream, but the solitariness engendered by residence in the bush made the man who had freely risked his life among the aboriginals—at a time when the face of a white man, in the regions he went into, was almost unknown to them—too timid to speak his heart out to a woman. He passed on his way, making inquiries about her for twenty years, but keeping his thoughts to himself, and finally devoting his solicitude to his flocks, and herds, and territorial possessions, and to the carrying on of that heroic fight with the desert which was to spread the limits of settlement and civilisation, and add still further to the development and value of our Colonial Empire.

So it is, therefore, that on account of this heroic fight, and in spite of all his eccentricities, real or alleged, James Tyson deserves to rank among the Empire-builders. As the *Melbourne Argus* well said in a leading article on the occasion of his death, "There was kinship between this shy and pastoral pioneer and the almost unpeopled spaces of Central Australia in which his life was largely spent." He had his own views alike of duty, of personal responsibilities, and of personal comfort. His tastes were certainly not those of the average millionaire.

“I am happiest,” he once said, “under the stars of heaven, with a bluey<sup>1</sup> for my pillow and a billy<sup>2</sup> of tea by my side.” But he played his “little game,” and it may be that, as he said, millions will be happier for it after he has been long dead and forgotten.

A splendid physique, due to plain living and abundant exercise in the open air, gave Tyson good health and strength down to within a comparatively short time of the close of his long life, the only noticeable change being a slight stooping in his well-built, firmly-knit figure, 6 ft. 3½ in. in height, and hitherto as straight as a deal. His principal residence was at Felton Station, Darling Downs, Queensland. There he lived his quiet bachelor life, his chief link with the world a library of many volumes, affording him a considerable extent and variety of reading, and giving to him, in spite of his keeping in the world's background, a wide knowledge of modern developments, and a keen insight into those great problems of life which he took much interest both in studying and in discussing.

He had been for some time in a low state of health, but, having never taken a dose of medicine in his life, he persistently refused to call in medical aid. He retired to rest as usual on the evening of 2nd December 1898, and in the morning it was found that he had quietly passed away.

<sup>1</sup> Bluey = blanket and kit.

<sup>2</sup> Billy = tin can.

## RAILWAYMEN WHO HAVE RISEN

**M**EN who, by reason of their plodding and steadfast perseverance, coupled with the requisite talent, have risen from the humblest to the highest positions open to them are especially conspicuous in the railway world.

The reason is not far to seek. There are various professions and occupations for which any person of ordinary intelligence can be fitted in a very short period, and in the appointment to them personal influence may count for much. But for positions of trust on great railways, where so many lives, or such vast interests, may be endangered by a system of management that is not based on a perfect grasp of details and a real administrative ability, requiring many years of experience in various departments, there can be no calling in of men from the street, and no favouring of individuals merely because they happen to be friends or protégés of some influential person. In the early days of British railways there was a great idea of appointing retired Army officers as general managers,—perhaps because it was thought they had

been accustomed to the work of organisation, and to dealing with large bodies of men. But this policy was soon abandoned, and the life-story of nearly all the chief officials of our great lines of railway is pretty much the same,—they entered the service as office boys, and by the display of energy and industry, smartness and tact, skill and real ability, they rose from post to post until they reached the highest of all. *Plus ça change, plus c'est la même chose.* They all begin at the bottom of the ladder. So it is that the railway service offers many remarkable illustrations of well-known masters of men who have risen from the ranks, and their example shows that, so far as there are high positions in the service to be filled—and the number is necessarily limited—there is no post on our railways to which the humblest beginners may not at least aspire.

Sir Myles Fenton is a case in point. He was just fifteen years of age when, in 1845, he became an office boy in the secretarial department of the Kendal and Windermere Railway, getting for the first twelve months no salary at all. At the end of two years he heard of a vacancy in the office of the passenger superintendent of the East Lancashire Railway, now the Lancashire and Yorkshire. He at once applied for it, and got it, thus acting on a principle he kept to as a youth and a young man,—that of changing from one railway to another, and from one department of

railway work to another, when the opportunity occurred, in order to get as much knowledge as possible. But with his greater experience on the East Lancashire he got an abundance of hard work as well. His chief duty was the checking of tickets and parcel returns, and at this by no means inspiring task he was sometimes kept on from nine o'clock one morning until two o'clock the following morning, his salary being only £1 a week. Had he been an orthodox trade unionist he would, perhaps, have gone in for the eight hours' movement, or struck for higher pay; but, being only a lad who was determined to get on in life, no matter what might be the toil involved thereby, he did what he was told, and stuck to the one post until something better turned up.

And something better did turn up, in due course, a berth, namely, in the office of the general manager of the old Eastern Counties line. Not long after this young Fenton became assistant to the Hull divisional superintendent of the Manchester, Sheffield, and Lincolnshire Railway; and, ever more or less on the outlook for advancement and experience, he soon after accepted the post of chief assistant to the goods manager of the London and South-Western Railway at Southampton. In 1854, when he was still only twenty-five, he was appointed secretary to one of his old companies, — the East Lancashire.

That one so young should obtain a position so important as a secretaryship was almost, if not quite, without precedent on English railways; but the energy and the ability he had shown left no doubt as to his fitness for the post. When the East Lancashire was amalgamated with the Lancashire and Yorkshire, the secretary of the former became assistant manager of the joint concern. At thirty-two he was manager of the Metropolitan Company, and in this position the capacity of which he had already given such abundant proof was, on one occasion at least, put to a severe test. At that time the Metropolitan Company had no engines of their own, but borrowed from the Great Western Company what they wanted. Owing, however, to some difficulty between the two companies, the Great Western gave notice to the Metropolitan that they intended to withdraw their engines. By the time that this notice was carried into effect the manager of the Metropolitan had secured for his line an independent set of engines,—an achievement which involved him in so much toil that he did not get to bed for nine days or nights. After being with the Metropolitan eighteen years he became, in 1880, general manager of the South-Eastern, and remained so until 1896, when he resigned, and took over the duties of consulting director.



Asked how he had equipped himself to hold the important positions which fell to his lot at so early an age, Sir Myles Fenton once replied to an interviewer that he did so by getting as much experience as he could of every branch of railway work. "I went," he said, "through the internal management of the whole thing. I acquired a knowledge of the routine of the secretary's office; I initiated myself into the mysteries of accountant's work, and, with experience derived from the passenger department and the goods office, I was tolerably well armed." In his desire to learn all he could he even rode occasionally on the engines, so as to get a practical knowledge of the running of the trains. Sir Myles Fenton has been much more of a "rolling stone" than most of the other general managers have been, but he must have gathered in no lack of "moss,"—proverbial philosophy notwithstanding.

The career of Mr. Frederick Harrison differs from that of Sir Myles Fenton in so far as he has spent all his life with the same company. He began as a clerk on the London and North-Western Railway at Shrewsbury, under the late Sir George Findlay, and followed him to Euston when Sir George became general goods manager, serving under him seven years. Then Mr. Harrison had three years at Liverpool, as assistant district superintendent, and about a year at Chester in

the same capacity. Returning to Euston as assistant superintendent of the line, he was appointed chief goods manager ten years later, and succeeded to the general - managership on the death of Sir George Findlay in March 1893.

Mr. J. L. Wilkinson was a boy of fourteen when, in 1859, he became a telegraph clerk on the Great Western Railway. He passed successively through the further stages of booking-clerk, goods clerk, and stationmaster, and at the age of nineteen he had already given such proof of his competency that he was made principal assistant of the goods manager at Euston. In 1885 he went out to the Argentine as general manager of the Buenos Ayres and Pacific Railway, but returned three years later, on the invitation of the Great Western Railway Company, to become their goods manager. In December 1895 he undertook the duties of acting general manager, and in July 1896 he became general manager of a railway system whose complexities may be judged from the fact that the different rates and charges in force on the Great Western number no fewer than thirty millions!

Sir Henry Oakley, who was born in 1823, began life as a clerk in Somerset House, and was afterwards an assistant in one of the offices of the House of Commons, before taking up a clerkship on the Great Northern Railway. Through various stages he rose to

be general manager in 1870, and was elected a director on his retirement.

Sir Allen Sarle, born at Westness Rousay, in the Orkney Islands, in 1828, was first a junior clerk to a firm of stockbrokers at Edinburgh, but came to London in 1845, and obtained an appointment with the Shropshire Union Canal Company. In 1848 he entered the audit office of the London, Brighton, and South Coast Railway Company, and was such an expert with figures, and so devoted to his work, that he was promoted to the post of accountant in 1854. The higher position of secretary followed in 1867, and, while still retaining the secretaryship, he became general manager as well in 1885. He acted in this dual capacity until 1897, when he resigned, and was elected a director.

Mr. J. F. S. Gooday, general manager of the Great Eastern, joined that company's service in 1863. Early promotion took him to Leeds, where he directed the whole of the Yorkshire business of the company. In 1877 he was called on to take part in the management of the continental and goods department, and he was appointed continental manager in 1880. He took over the post of general manager of the London, Brighton, and South Coast Railway on the resignation of Sir Allen Sarle in 1897, but returned to the Great Eastern when the general-managership of that line was offered to him in 1899.

So one can go on through practically the entire list of higher railway officials. Mr. James Staats Forbes started as a booking-clerk on the Great Western Railway, and rose to be chairman and general manager of the London, Chatham, and Dover, and chairman of the Metropolitan District.

Mr. G. H. Turner, who, early in 1901, retired from the position of general manager of the Midland Railway, lost both his parents when a boy. He lived with his stepmother, a vindictive sort of woman, by whom, long before he reached his tenth year, he was sent to a bakehouse at five o'clock in the morning to work there until it was time for him to go to school. He was made to go to bed at five in the evening so that he might be certain to rise early in the morning, and even his Saturday afternoons he had to spend in the bakehouse. He left school at the age of eleven owing to illness brought on by over-study, and he was then put in the office of one of Messrs. Pickford's agents, where he worked from seven in the morning until half-past nine at night for a wage of half a crown a week. Four years later he entered the service of the Midland Railway Company, at Bristol, at a salary of £1 per week. He rose from post to post, becoming general manager in 1892.

Sir Charles Scotter, late general manager of the South-Western Railway, on which he accomplished

such wonderful results in practically re-modelling and re-arranging the entire system, had his first experience of railway work as a junior clerk at the Hull depôt of the Manchester, Sheffield, and Lincolnshire Railway; while his successor in the general-managership of the South-Western, Mr. C. J. Owens, was, in 1862, a junior clerk in the company's audit office. Mr. William Pollitt started with the Manchester, Sheffield, and Lincolnshire (now the Great Central) as a lad in 1857, and Sir James Thompson joined the Caledonian service in 1848, each rising from the ranks, by reason of hard work and signal proof of capacity, until the coveted position of general manager fell to his lot.

To give still more examples would be wearisome. Those already offered are sufficient to prove that in the railway world, as in Napoleon's army, every recruit carries in his knapsack the bâton of a marshal, and that in few occupations in life open to aspiring youth is the principle of *La carrière aux talents* more cordially recognised. It does not follow that every junior clerk possessed of industry, perseverance, and capacity who enters the service of a railway company will be able to climb to the top of the tree,—the available space there being so very limited! But it is certain he will not get there without the qualities mentioned, while with them he ought, at least, to reach a higher branch of the tree than those who do not try to climb at all.

## LABOUR MEMBERS

THE introduction into the House of Commons of direct representatives of the labouring classes was the natural result of those extensions of the franchise which placed greater political power in the hands of the artisan community, and, although the innovation gave rise to no slight degree of uneasiness in various quarters, the result has been to show that Labour Members may become a distinct acquisition to Parliament, and are well capable of winning respect for themselves in an assembly admission to which had previously been regarded as almost the special prerogative of the moneyed class.

It was not until 1874 that the first Labour Members were returned to the House of Commons, the pioneers being the late Mr. Alexander Macdonald and Mr. Thomas Burt. There had been earlier attempts to secure working-class representation, but they were not successful; and in 1873 there was brought into existence a Labour Representation League which had a good deal to do alike with the return of Mr. Macdonald for Stafford in the following year, and in calling public

attention to the whole subject. The League itself did not continue long in active operation, but it nevertheless formed a distinct landmark in our industrial and political development. The conviction had been gaining ground that, instead of depending on disputes with individual employers for the redress of grievances which were often the result of imperfect or inadequate laws, it would be better for the working classes to become possessed of a voice in the making of such laws; while there were various reforms, much desired in the interests of the labouring classes, which, it was thought, could best be expounded by men who themselves belonged to those classes. To these general aspirations was added the steadily-increasing desire of the trade unions for greater political power, with the special object of obtaining reforms in the laws relating to labour and trade combination; and on this point discussion more particularly arose in the seventies in consequence of several legal decisions which were regarded as showing serious deficiencies in the Masters and Servants Acts of 1866, and also an undue severity in the administration of the Conspiracy Laws, as applying to labour disputes.

These brief observations may help to a better understanding of the special reasons which led to the advent into Parliament of the Labour Member. Our present object, however, is not to deal with the subject from its

political or economic standpoint, but to sketch the lives of a few of those who have come under the denomination of Labour Members, with the view of illustrating the qualities by which men of lowly birth can hope to rise to the honour of being numbered among those who are the makers of our laws and the real rulers of our Empire.

Reference has already been made to the late Alexander Macdonald. He was only eight years old when he first descended a Lanarkshire coal-pit to help his father in his work as a miner. The conditions of mining, hazardous enough at all times, were terrible in 1831, when young Macdonald thus gained his initial experiences underground; and the sights he saw, the trials he endured, and the dangers he passed through made such an impression on his mind that even as a boy he resolved that if he ever had the power he would do something to improve the lot of such toilers as those with whom he laboured. He had little or no chance of ordinary schooling, but he attended a night school, while, being a lad of much intelligence and energy, he devoted much of his spare time to reading and study, his special object being to qualify himself for some more desirable occupation than coal-mining. He was able to enter the Glasgow University for two sessions, supporting himself with the money he had earned during the summer.



He continued to follow his occupation as a working miner up to 1850, when he left the coal-pit, and for the next four or five years he was a country school-master. But, though no longer a miner himself, he had not lost his interest in his former comrades. He set himself so resolutely to work to obtain some improvement of their lot, and to reduce the dangers of their daily life, that he soon became one of the most prominent men among them. His zeal and capacity marked him out as possessed of the qualifications of leadership, and he was appointed to various positions in connection with English and Scottish Miners' Associations, which he greatly helped to become both wealthy and powerful. In 1863 he was made president of the National Miners' Association, a post he occupied for seventeen years. He had taken an active part in various movements which aimed at securing legislative reforms in favour either of miners or of workers in general, and he visited the United States in order to compare the industrial conditions of that land with those existing here. His services were recognised in 1873 by the presentation to him of £1500, subscribed for by the miners; but it was further thought that a man who had done so much for the mining community when he was outside Parliament would be able to do still more if he became M.P. The working-class population of Stafford sympathised

with this view by nominating him for that constituency in the General Election of 1874, and he was duly elected, his expenses being paid by a subscription among the miners of the United Kingdom. He distinguished himself as a sturdy champion of the rights of miners, and for many years he exercised a paramount influence among them; though this influence waned somewhat when other advisers came to the front. His extreme views, also, on various questions did not meet with general acceptance. His death in October 1881 was, nevertheless, a source of great regret, especially among the class whose advancement he had made the aspiration of his life.

Mr. Thomas Burt, who has represented Morpeth since 1874, also started as a working miner, his first descent of a coal-pit being in 1847, when he was ten years old. He had then had about two years' teaching in a dame school. He began as a "trapper,"—that is he had to crouch down near a door in the workings so as to open or close it when the trucks went past. For a day of twelve hours of this sort of labour he got tenpence. Advanced to the position of pony-driver, he was paid fourteenpence for his twelve hours, and a still further advancement brought him an extra fourpence. Later on he became a "water loader" at half a crown a day, afterwards increased to three shillings and sixpence.

All this time he had been keen on improving his

education, and the young miner who was spending a full twelve hours a day in the coal-pit, exclusive of the time of descending and ascending, and of walking between pit and home, would take his books with him into the mine, and study them either in the dinner-hour or at odd moments by the dim light of candle or safety lamp. A fit subject this for an artist who wished to paint a picture illustrating the pursuit of knowledge under difficulties! The life he led gave to young Burt, as in the case also of Alexander Macdonald, a profound sympathy with his fellow-workers, and a keen desire to do something for them.

At the age of fifteen he became a teetotaller, and it was total abstinence that launched him on his public career two years later. Here is the story, as told by himself:—

“ My first acquaintance with public life came when I joined the teetotal movement, and it was at a teetotal meeting in a Primitive Methodist chapel at Old Hartley that I made, or, rather, tried to make, my first speech. It was a complete break-down. I had to stop before I spoke many sentences. Then they sang a hymn, but I was still unable to go on, and I said to the meeting, ‘ Call your next man,’ which they did. I was then only seventeen. I said that I would never attempt to speak again until I got whiskers. My life at this period was also influenced by what was called, in

inflated language, a Mechanics' Institute. In reality it was a single small room ; but the papers were kept there, and that was an education."

In addition to taking to teetotalism he began, at fifteen, a more systematic course of study than he had otherwise pursued, and his efforts at self-improvement were carried on with such zeal that, after having spent his day in the coal-pit, he would devote himself until far into the night either to school books or to reading such authors as Shakespeare, Tennyson, Adam Smith, Stuart Mill, Bastiat, Thornton, and Fawcett. This was his occupation while the other miners were spending their leisure in the public-house. The object he had in view was not only to obtain employment elsewhere than underground, but to qualify himself to obtain the elevation and material advancement of the mining community in general. In spite of his first break-down at public speaking when a beardless boy, he persevered, and, by dint of practice in giving temperance addresses, he acquired a clear, persuasive style. This, coupled with an abundance of intelligence and of aspiration to be of use in the world, gained him the esteem of his comrades, who regarded him as a capable adviser and a valuable helper.

His knowledge of men and books, his talents as a speaker, and his powers as an organiser all marked him as a leader of men ; and in 1864, when he had

reached the age of twenty-seven, he was appointed a delegate to the Council of the Miners' Association of Northumberland. A year later he was appointed general secretary of that association. He was then still working underground, being a hewer at Choppington mine; but his comrades thought that, although so young, a more capable man could not be found to get their association out of the depressed condition into which it had fallen. A strike then proceeding at the Cramlington mine had so far exhausted the union funds that there was only £23 left in the cash-box, and the men were thoroughly discouraged. The new general secretary of eight-and-twenty at once set to work, revived the hopes of the miners by his eloquence, and brought all his skill as an accomplished organiser to bear on the union. So it came about that the number of members increased, the subscriptions rolled in, and when the strike ended the cash in hand stood at £700. Within seven years of his appointment Mr. Burt was able to report that the membership had increased from 4000 to 16,000, and the funds in hand stood at £16,000. Nor was this all, for the combination of tact, firmness, and courtesy shown by Mr. Burt had led to a distinct improvement in the relations between the coal-owners and the coal-workers in the county.

In 1868 Mr. Burt was urged by the miners to

consent to his nomination as parliamentary candidate for Morpeth, they undertaking to pay not only his election expenses, but for his maintenance in London. They wanted to have a voice in the making of the laws of the country, and they wanted especially to have the interests of the mining community looked after in the House of Commons by one of themselves. At that time such a proposal was absolutely new, and the general secretary begged his comrades not to suggest things that he regarded as quite impossible. He did not believe that a man who had not long ceased to be a working miner had the remotest chance of being returned to the Imperial Legislature, and he advised them to leave alone what was merely a foolish dream. They did leave it alone for a time, but in 1874 they made fresh appeals to him which he could no longer resist. He was then nominated for Morpeth, and was returned by a majority of 2747 votes over those given for his opponent.

Mr. Burt soon came to be regarded even in the House of Commons as a distinct acquisition to that assembly. Modest and unassuming in his manner, speaking only on subjects on which he was well informed, and expressing his views in an open and straightforward way, he won general regard alike for his personal qualities and for his skill as a politician. The man who, though he had earned his daily bread

underground, had chosen Shakespeare, Tennyson, Adam Smith, and Stuart Mill as companions for his leisure moments, found that he could well adapt himself to the society of his "betters" in the House of Commons, and that, too, without giving reason for the slightest suspicion that he was ashamed either of his own origin or of those whom he represented. It is even said that on one occasion when Sir Stafford Northcote (afterwards Lord Iddesleigh) was asked who was the most accomplished gentleman in the House of Commons, he replied, "Mr. Burt, the representative of the miners."

As a further illustration of the respect which Mr. Burt won for himself, reference may be made to an incident which, probably, is not generally known. During the prevalence of a severe depression in the coal trade the rumour was circulated that Mr. Burt was about to retire from Parliament because the Northumberland miners could no longer pay for his support. Thereupon Mr. William Rathbone, of Liverpool, whose name is associated with so many good works, wrote to him saying he thought it of the greatest importance that labour should be represented in Parliament by men who understood labour questions, and who sympathised with, and possessed the confidence of, the working classes, without being soured against the employers and capitalists; and he concluded

by intimating, with the utmost delicacy, his willingness to send to Mr. Burt a cheque for £500, hoping that some permanent arrangement would be made to support him or any other representative of the workmen who might be sent to the House of Commons.

To this Mr. Burt replied that there was no truth in the rumour. He warmly appreciated the great kindness and generosity of Mr. Rathbone's offer, but if, he said, the miners of Northumberland could not support him, he should retire from the House of Commons, as he could not accept any other arrangement than the existing one, unless there was established a general system of payment of members.

Whether the greater honour was due to the one who offered the £500 or to the one who declined it, the reader must judge for himself.

Mr. Burt has served on various Royal Commissions. He was one of the British delegates to the International Labour Conference convened by the German Emperor, and held at Berlin in 1890; and he was invited by Mr. Gladstone, in 1892, to join his Ministry as Parliamentary Secretary to the Board of Trade, a post which he accepted, though he informed the miners that, while still regarding himself as their representative, he would not take any subsidies from them so long as he held office.

Altogether Mr. Burt may well be regarded as



entitled to an honourable place among those who have risen to a high position in the social scale from the humblest of beginnings, and it redounds greatly to his credit that the improvement in his own good fortunes has never led him to turn his back on his old friends, but has only increased his desire to do all he can for the class from which he sprang, and with which he still feels an honourable pride in being associated.

Mr. Henry Broadhurst, who first became M.P. in 1878, and held office under Mr. Gladstone in his short Parliament of 1886, as Under Secretary for the Home Department, made his way to the Treasury Bench from the bench of a stonemason. His father was a journeyman mason at Littlemore, near Oxford, and earned from twenty to twenty-four shillings a week, on which he brought up a large family. Henry Broadhurst left school, in 1852, at the age of twelve, had a year partly in doing odd jobs, and partly in a blacksmith's shop, and then started to learn his father's trade. Entering the "shop" at Littlemore, the future statesman's first most important duties, as a new-comer, were to prepare tea or coffee for thirty or forty men at eight o'clock every morning, and to get beer for them at ten o'clock, and again at three in the afternoon, this beer having to be fetched from a public-house a mile away, kept by the foreman of the yard. But Henry Broadhurst acquired a knowledge of the mason's art all the same. Then

for about two years he "went to Oxford,"—not to study in the colleges, but to work on their roofs, or to otherwise help in repairing or extending them. When business grew slack in the neighbourhood of Oxford the young mason went on his travels.

During four months in the winter of 1858–59 he tramped 1200 miles without obtaining a single day's employment. He had started with only ten shillings in his pocket, and he had to depend for support on the members of the trade in the towns through which he passed. Sometimes he had a single shilling with which to provide supper, bed and breakfast; at other times he had not a single coin, and the trade "stations" might be forty or fifty miles apart. After suffering great hardships he got work at Norwich, where he stayed some years, removing about 1865 to London. In the Metropolis he was employed by various firms, and he worked on the Houses of Parliament, where, at a future date, he was to take his seat; on the Government offices in Parliament Street, which he was one day to enter as a member of the Ministry, and on many other public buildings. It was in an important dispute that broke out in his trade in 1872 that he first distinguished himself as a labour leader. He soon became more and more active in promoting trade union interests, and in helping forward the reform and other political movements, working so hard that he was often

up at half-past four in the morning, though he had not got to bed till midnight. Making his mark as a man of capacity, he was, in 1872, appointed delegate of the Stonemasons' Society to the Trade Union Congress, where he was elected a member of the Parliamentary Committee. From this time he ceased to work at his trade. In 1873 he was appointed secretary to the Labour Representation League, and in 1874 he was himself nominated, at the eleventh hour, for High Wycombe, but was not elected. Then, in 1875, he was appointed Parliamentary Secretary of the Trade Union Congress,—a position he held until 1890, when he had to resign on account of ill-health.

In 1878 came his election for Stoke-upon-Trent. At that time his income was only £150 a year, and out of this he had to pay for clerical assistance. He thus required to practice the severest economy. In the story of his life which he has recently published he says: "For years past all my clothes had been made at home by my wife, and for several years of my parliamentary life my wife remained my only tailor,—a circumstance which, I fancy, is unique in the history of the English Parliament." His home-made clothes did not, however, mar his usefulness as a member, and he was very active in suggesting or supporting legislation in the interests of the working classes; but he steadily declined all invitations to dine out, and was

never ashamed to confess that he did not possess a dress-coat.

In 1884 Mr. Broadhurst was appointed a member of the Royal Commission on the Housing of the Poor, and in common with the other Commissioners was invited by the Prince of Wales to visit Sandringham. The dress-coat difficulty was one of several reasons which led him to beg to be excused; but the Prince of Wales gave him a special invitation a little later on, and Mr. Broadhurst then went alone to Sandringham, was the Prince's guest from Friday to Monday, and was made to feel thoroughly "at home." "On my arrival," he says, in the account he gives of the visit, "his Royal Highness personally conducted me to my rooms, made a careful inspection to see that all was right, stoked the fires, and then, after satisfying himself that all my wants were provided for, withdrew and left me for the night." In order to meet the difficulties in the matter of dress, dinner was served to the guest in his own rooms. Then there is a delightful picture given by Mr. Broadhurst of how the Prince took him to the village club,—which was really the village public-house, though not conducted for profit,—and how they there had a glass of ale each, sitting among the farm labourers, who went on with their own half-pints and their pipes without being in any way embarrassed. As for the Princess of Wales, she herself

showed Mr. Broadhurst over her beautiful dairy. That one who had spent so many years of his life as a working mason, who, as we have seen, had tramped the country for months together, often in a penniless condition, in search of work, should be thus so cordially received and personally entertained by the future King and Queen of Great Britain, was one of the most striking events in a remarkable career.

The dress-coat difficulty cropped up again in a still more acute form when Mr. Broadhurst became Under Secretary of State in the Home Department in Mr. Gladstone's short-lived Parliament of 1886. It was then a question of his putting on not merely a dress-coat but a court suit, in order that he should, according to custom, be presented to the Queen. But he begged so hard to be excused that Her Majesty was graciously pleased to dispense with his attendance, and the M.P. who had already established one record by sitting in the House of Commons in a suit of clothes made by his wife, now secured another by being the only occupant of a seat on the Treasury Bench who had never been presented at Court.

For an account of the work done by Mr. Broadhurst during his political career, and of his pertinacious efforts to promote the welfare of the industrial classes, reference must be made to his own book, which will be found one of the most interesting biographies of

recent years. The brief narrative here given will suffice to show the great possibilities that may be open to even so humble a person as a working stonemason, and in this respect even those who may be disinclined to accept Mr. Broadhurst's opinions on political questions will admit that the story of his life is full of encouragement and stimulus for those who may aspire to make a name for themselves.

Another most striking example of the influence to which a working man who possesses the needful qualities can attain in English public life is afforded by the career of Mr. John Burns, M.P. Whatever view may be entertained of his principles and utterances,—and both have found a large number of adverse critics,—no one can fail to recognise the prominent position Mr. Burns has won for himself in the labour world, in London municipal life, and in the Imperial Parliament. This position he has secured by sheer force of character, combined with sheer hard work. His opinions may have been open to question, but he has stuck to them conscientiously, and his popular nickname of "Honest John Burns" suggests, what is undoubtedly the case, that he has never allowed his personal interests to influence his public work. His thorough honesty is one reason why his views are listened to with respect even by those who are diametrically opposed to them, while he expresses those views in a style so epigram-

matic, and gives evidence of a personality so striking, that as a speaker he never fails to secure marked attention. It does not take him long to get to the point, and there are no refinements of euphuism about John Burns. The story is told that on one occasion he and Mr. Cecil Rhodes had a long talk together,—the apostle of modern democracy with the representative of the highest type of modern capitalism. In the course of conversation Mr. Rhodes said, “Well, Mr. Burns, I am surprised to find you are not a Little Englander; but I don’t know what you would do with me if you had me in your power”; and thereupon Mr. Burns replied, “I can easily tell you that. I would put you with your back against a wall, and fill you up with lead.”

On another occasion, after a visit to America, where he had been to inquire into the condition of the working classes there, Mr. Burns defined Chicago as “a pocket-edition of Hell.” Such sayings as these are certainly not examples of polite diction, but they are characteristic of the man, and of his boldness in the expression of his opinions. John Burns is, indeed, the last person in the world to believe in the dictum that “language was given to man for the concealment of his thoughts.”

But, while one cannot regard Mr. John Burns and his socialistic views as a complete model for the emula-

tion of youth, there are points in his career deserving the consideration of those who wish to succeed in life. Like so many other masters of men, he has been indebted for his success mainly to his own energy. He got such education as his mother, a poor widow living in Battersea, could afford to let him have, and even as a schoolboy he had to take to some casual employment in the evening, in order to earn a little money to keep things going at home. The year 1868, when he was a lad of ten, saw him fairly started in life as a worker in a candle manufactory; but that place he soon left in order to be apprenticed to an engineer. He was ambitious to get on, and devoted much time to study, the subject of economics being specially attractive to him.

In 1877 he went out to Africa as foreman engineer for the Niger Company. For his mental nourishment on the Niger he took Mill's *Political Economy*, while he made the curious find at Akassa of a copy of Adam Smith's *Wealth of Nations*, buried beneath the foundation of an old engine shop. Returning to England at the age of twenty, with £100 in his pocket, he married, and had a six months' tour through France, Germany, and Austria, where, in addition to sight-seeing, he made a study of the industrial and economic conditions of those countries. Then he settled down to work and agitation at



Battersea. In 1884 he started a crusade among the dockers, hoping to do something to improve their lot, though it was not until August 1889 that the great dock strike, of which he was to be the prime mover, actually occurred. During 1884-85-86 it was no unusual thing for him to rise at three or four in the morning, summer or winter, tramp with his wife to three different dock gates, and there make speeches to the men before beginning his day's work in the West End at seven or eight. He also addressed gatherings in Trafalgar Square, came into conflict with the police on several occasions as a defender of the "rights of public meeting," and in 1887 got three months' imprisonment owing to a disturbance that occurred. He became a member of the London County Council in 1889, the working men of Battersea providing him with two guineas a week in order that he could devote himself to public work; and he was elected M.P. for Battersea in 1892, the allowance from his working-men supporters being then increased so as to assure for him a total income of five guineas a week.

The merits or demerits of John Burns as a public man are matters which we need not stop to discuss; but the suggestion that his success is substantially due to sheer hard work is fully confirmed by the conditions of his home-life at Lavender Hill. There

he has a "workshop" in which, whether as an orator in Parliament, as an active toiler on the County Council, or as an agitator on Clapham Common or elsewhere, he collects the raw materials of his speeches and his projects. The workshop in question is a library of books, pamphlets, and other publications which it has taken him many years to get together, and of which he is not a little proud. At the end of the room there is a home-made cabinet, each drawer of which is divided into compartments, and labelled for newspaper cuttings, so that when he wants to refer to any such subject as housing, strikes, thrift, and so on, he can at once put his hand on what he has by him dealing with each particular question. Such good use, too, does he make of his stores of information that he ranks among those who know him best as essentially a well-read man; and he can talk on books, pictures, music, architecture, sciences and the arts in a way that the majority of those who consider they possess a good general knowledge could not readily surpass. Such a library could not have been got together without the exercise of a good deal of thrift. An income of five guineas a week might do very well for an engineer, but it cannot go far in the case of a combined County Councillor and Member of Parliament; and it is a well-known fact that Mr. Burns has practised a rigid economy

all his life. He neither drinks nor smokes, he lives on the plainest of food, considers himself sufficiently well dressed in blue serge and a straw hat, despises overcoats, and rides to the House of Commons on a bicycle, so that he can save the tramcar fares between Battersea and Westminster.

Hard work, hard study, and absolute fidelity to his convictions,—in these qualities will be found the chief reasons why John Burns has been able to attain the position he holds among the public men of to-day.

## AN EVANGELIST IN TERRA COTTA

I N the topmost room of the Doulton Company's art department in High Street, Lambeth, almost in the shadow of the venerable Lambeth Palace, Mr. George Tinworth is "at home." He may sleep elsewhere, and take his meals elsewhere, but it is in his studio, where he produces those wonderfully realistic pictures in terra cotta which have carried his name and fame throughout the world, that this artist in clay really "lives." There, at one time, he would toil from 8 a.m. until 9 p.m.; but with increase of years he has found necessary a decrease of labours, and now it is in the mornings that most of his work in the studio is done. But even when he is not there in the body he is still there in the spirit, for his leisure time is mostly occupied in planning the programme to be carried out when he gets back to his studio *sous le toit*.

A very strange sort of studio it is, too. The privileged visitor ascends one flight of stairs after another until he wonders when he will reach the top. At last he comes to an attic which is labelled "Mr.

Tinworth," and he is invited by his conductor to enter. On doing so he finds himself in front of an enormous box, formed of wooden roller shutters, like those used for shops, and lighted from the roof, each side of the box being down when the artist is at work inside. The conductor calls out in a mysterious tone, and then disappears. As the visitor is wondering what will happen next a small door in the side of the box opens, and Mr. Tinworth's genial smile welcomes him into what might be literally called his "den."

There the first impression one gets is that the said den, with its strange collection of clay, cloths, moulds, lay figure, and odds and ends of all sorts, is Doulton Company's lumber room, and that the person who steps forward, attired in a long white linen over-all, and with his hands more or less covered with clay, is a plasterer who is "doing it up." But the workman's attire is forgotten as one sees a face so suggestive of thought, piety, and genius, and the apparent lumber is overlooked when the eyes of the visitor rest on the particular work on which the artist has just been engaged. On the occasion of the writer's visit that work was a new panel, some nine feet long and about four feet deep, representing "The Entry of the Apostle Paul into Rome," the idea of which, it seems, suggested itself to Mr. Tinworth when he was walking down the Appian Way, on the occasion of one of his rare

holidays. The apostle is represented as entering Rome in a chariot drawn by oxen, preceded and followed by other prisoners on foot, while in the background there is a Roman funeral procession, the whole (with much minor detail) being surmounted by the abundant foliage of a group of chestnut trees. Some of the figures already completed stood out with a vigour and a perfection of expression not surpassed in any of Mr. Tinworth's previous works; but others were still unfinished, and it was interesting to see on the one side the little masses of shapeless clay with which the artist worked, and on the other the living model—an Italian born within a few miles of Rome—whose well-formed proportions were the copy for the conversion of this clay into soldiers supposed to be guarding the prisoners. Of the large panels, it may be explained, only a single specimen is produced. The individual figures constituting the group are formed separately, and then placed in position, the whole panel being sent to the kiln when complete; though this state of completion is often not reached until many months have elapsed since the work was started, the panel having, in the meantime, to be kept constantly moist by means of wet rags. In the case of some of the smaller panels a mould is taken, and two or three copies may be made, the mould then being broken up. How many panels and other works

of art Mr. Tinworth has produced altogether is more than he himself can tell ; but of large and important pieces alone the number is more than a hundred, nearly all of these, and many of the smaller ones as well, dealing with Biblical subjects.

Mr. Tinworth's knowledge of the Bible is profound, and his mission in life has been to translate into terra cotta not only the main incidents of both Old and New Testament history, but many others—such, for instance, as "The Brick-making in Egypt"—which the ordinary sculptor or artist would probably not deal with. He gives us, if not exactly "sermons in stones," then at least sermons in terra cotta. He seems to think in clay, and he expresses his ideas with a realism and a striking effect that, in many instances, neither spoken words nor painted canvas could equal. He possesses in a pre-eminent degree not only the artistic but the dramatic and the historic sense. It is as though he had himself been a spectator of every scene he depicts, while though the tragedy suggested by the central figures may be terrible enough, he brings out little touches of humour, of human nature, or of byplay, as it were, which afford a distinct relief, and are characteristic alike of the artist's imaginative power and of his aspiration not to overlook the minor in presenting the greater. Thus on one panel, "Waiting for the Head of John the Baptist," there is

shown a monkey which is lifting the lid of a jar and looking inside; on another a soldier who is plaiting the crown of thorns has pricked his finger and is putting it to his mouth; in a third the raven taking food to Elijah is fetching it from Ahab's table; while in still another, representing the deluge, a miser is seen holding up a bag of money as high as possible out of the reach of the waters. Points such as these have had a great deal to do in securing for Mr. Tinworth's panels the close attention and appreciation they never fail to receive; but the main lessons taught by them are in no way endangered. How well the panels serve their special purpose is shown by the words of the late John Ruskin, who wrote of "The Release of Barabbas": "After all the labours of past art on the life of Christ here is an English workman fastening, with more decision than I recollect in any of them, on the gist of the sin of the Jews and their rulers in the choice of Barabbas, and making the physical fact of the contrast between the man released and the Man condemned clearly visible."

That Mr. Tinworth should have attained to so high a degree of success is the more remarkable because of the circumstances of his early life, which offered to him no inducement whatever beyond the promptings of his innate genius to devote himself to art. His father was a wheelwright, and carried on business near



Camberwell Gate, Walworth, where George Tinworth was born on 5th November 1843. The family was of a severe Nonconformist, if not of an advanced Puritanical type, and the mother not only began to teach her son the Bible almost as soon as he commenced to speak, but would not allow him to read any other books whatever, alleging that some were profane and the others were unworthy of being read. Her conversations with him, too, mainly related to the episodes and incidents of Holy Writ, which were thus so impressed on his mind that they became part of his second nature.

George Tinworth was only a child of six when he began to show a precocious taste for modelling, his interest in which was first aroused by seeing in Camberwell fair a *tableau vivant* representing the "Dying Gladiator." His earliest actual attempts at carving were in the direction of cutting some butter stamps, and after this he carved some small wooden figures. The father, who was devoid of any appreciation of art whatever, and intended that his son should be a wheelwright like himself, strongly objected to his "wasting time" on such things; but the mother saw and appreciated the bent of the lad's genius, and not only encouraged him to persevere but supplied him with the means of attaining any materials he needed. And persevere he did. Mr. Tinworth remembers how, on one

occasion, he and a number of companions collected in front of a poor woman's house, where, with the help of a nail and a stone, he had made good progress in carving a head on the doorstep before the occupant of the house came out and disturbed them. Then he has done a small panel which shows him in the wheelwright's shop doing some carving on a piece of wood held in a vice, while another boy is keeping a look-out for the father, on whose approach the carving would be hurriedly put out of sight and the wheelwright's work proceeded with.

All this time the family had to carry on a struggle with more or less impoverished conditions. The earnings of the father were very small, and there seemed to be little chance of the lad getting any instruction in art. But the chance came to him at last. After the day's work was over he and a companion used to go to a small School of Art which had been founded in Lambeth by Canon Gregory, and there young Tinworth would mount on his companion's shoulder and peer through the window into the well-lighted classroom, ardently longing that he could only have the chance of being taught there. One night he took with him a small head of Handel which he had carved out of a piece of sandstone, hoping to have a chance of showing it to the head-teacher of the school. He and his companion stood at the door, Tinworth too timid to

enter, and his companion urging him to do so, when the teacher, Mr. John Sparkes (who afterwards rose to be head of the South Kensington Schools), opened the door. He noticed the little carving in Tinworth's hand, looked at it, saw signs of merit in it, and asked him if he would like to see the school. There was at that moment nothing that Tinworth would have liked better, and, with his ardent aspirations for art teaching, the place seemed to him, as he puts it, "just like heaven." After this the fascination of the Art School was irresistible. He pawned his best coat in order to raise the fees—and often enough afterwards the coat went to the pawnshop again for the same purpose—and so at last he began a proper course of study. There was muttered discontent on the part of the father, who still declared that "there was no money in it." But when, one evening, he saw three pounds in silver spread out on the table, the amount realised by George Tinworth from the sale of his first terra cotta panel, he began to change his opinion, for it was long since such a sum of money had been seen in the house.

The young student made rapid progress at the School of Art, though he was able to attend the classes only in the evening, after doing a day's work in the wheelwright's shop. In 1864 he was admitted to the schools of the Royal Academy, his way thereto having been facilitated by a model of Hercules, which he had

executed under the direction of his good friend Mr. Sparkes. Two years later he exhibited at the Royal Academy a group of figures, "Peace and Wrath in Low Life," depicting two street arabs fighting, two little girls acting as peace-makers, and a dog barking. He gained at the Royal Academy various medals and honours, and from that time he "never looked back."

George Tinworth was still, however, earning his daily bread in the wheelwright's shop, and the death of his father not only left the business on his hands, but made him responsible for the support of his mother. All he could earn there was thirty shillings a week, and he keenly desired to have the chance of giving up the business for something more congenial to his tastes. Again the chance came to him, the helping hand being once more that of Mr. Sparkes. Hearing from Mr. (afterwards Sir) Henry Doulton that he wanted someone who would assist in the production of more decorative forms of stoneware than those hitherto made, Mr. Sparkes introduced Mr. Tinworth to him. The young wheelwright gladly gave up his own business for the position of modeller to Mr. Doulton, and a connection was thus established which has been maintained ever since, each being an important contributor to the fame of the other.

Mr. Tinworth's earliest work at Doulton's was the modelling of a filter. He was then transferred to figure work, copying some ancient Greek and Sicilian coins,

and reproducing them in terra cotta many times their original size. It was these that first brought him under the notice of Mr. John Ruskin, who became an enthusiastic admirer of his work. Mr. Tinworth carried out in terra cotta a fountain for Kennington Park, the design of which had been suggested by Mr. Sparkes, and he showed at the Royal Academy in 1874 a group of three panels: "Gethsemane," "The Foot of the Cross," and "The Descent from the Cross." The very favourable terms in which the late Mr. Tom Taylor spoke in *The Times* of these three panels had a great influence in helping to establish the artist's reputation. In 1875 Mr. Tinworth showed at the Royal Academy some further panels, which were warmly praised by Mr. Ruskin, and a visit paid to the Doulton works by Mr. Ruskin and the late Mr. G. E. Street, the famous architect, led to the latter gentleman securing for Mr. Tinworth a commission to execute the large panel of the "Crucifixion" for the reredos in York Minster, and twenty-eight panels for the Guards' Chapel, in St. James's Park. Many other panels followed, and in 1883 there was a collected display of Mr. Tinworth's works at the Conduit Street Gallery, among them being the famous "Release of Barabbas." The exhibition was opened by the Prince and Princess of Wales, and not long afterwards two of Mr. Tinworth's panels were placed in Sandringham Church.

To speak in detail of the scores of other panels that Mr. Tinworth has produced for churches of all types and all degrees not only throughout the United Kingdom, but in Copenhagen, America, and elsewhere; of his portrait-memorials and groups for public institutions or public parks, and of his numerous miscellaneous works, grave or gay, much more space would be required than can here be spared. Suffice it to say that they include separate series illustrating, among other things, the story of Joseph, the history of Moses, a great variety of incidents in the life of our Saviour, and, in fact, all the leading points in Biblical history, the New Testament subjects being especially successful. They have well been called "The Bible in Sculpture." Not only do they serve to illustrate facts already well known to Bible students, but the artistic power, the imagination, and the profound scriptural knowledge of Mr. Tinworth often allow of the presentation of those facts alike in a new and more realistic light, and with an accompaniment of minor but still striking incidents that otherwise might not suggest themselves. The panels thus become, in effect, Bible "helps" or "commentaries" in terra cotta, and the visitor to Mr. Tinworth's studio may well be allowed to recall the words that Longfellow wrote concerning the town of Nuremberg—

"Here, when Art was still religion, with a simple, reverent heart,  
Lived and laboured Albrecht Dürer, the Evangelist of Art."

## THE MARTYR MISSIONARY OF NEW GUINEA

A WORTHY Scottish pastor was addressing a Sunday school at Inveraray one afternoon on the subject of missions in Fiji. Having explained to the children the nature of the work that was carried on, and told them of the good that was being done, he said, "I wonder if there is any lad here who will become a missionary?"

There was at least one lad upon whom his remarks made a strong impression. That lad not only said to himself "I will," but on his way home he made a vow that he would some day join in the work of converting the heathen.

It was a boyish resolve, to be forgotten as soon as the first impressions of the pastor's address had worn off, but to be recalled and carried out in after years, forming as it did the first link in the chain of events which made James Chalmers a missionary in New Guinea, and led to his murder there in 1901, after he had secured a power and influence over the savage

mind that could hardly be surpassed in the whole field of missionary effort.

There are no struggles to be told of in connection with James Chalmers' early life. He was born in 1841, at Ardrishaig, but was brought up at Inveraray, whither his parents removed when he was quite a child. They were able to give him a good education, from which he profited so well that he carried off a large share of the school prizes. He was full, too, of robust health and manly spirits, a leader alike in sports and in all kinds of mischief and deeds of daring. A stranger to fear, he was twice taken home apparently drowned, and on four occasions during his early life he himself saved persons from drowning. Once, too, his juvenile imagination fired by what he had read of Robin Hood and his merry men, he formed a band of boy outlaws, who had a fine time of it before their exploits were brought to an end.

All this was good training, no doubt, for the life full of adventure, risk, and peril he was to lead in savage lands in after years, when his stores both of pluck and endurance were to be well taxed. The original idea of his parents was to bring him up as a school teacher, but he drifted, instead, into a lawyer's office, the duties of which were so little to his liking that at the age of sixteen he planned with two other youths to run away to sea; and he would have done so



but for fear of causing distress to his mother. Two years later he was deeply impressed by the ministrations of some young evangelists from the north of Ireland, and he himself became an evangelist in his way, holding religious meetings after his day's labours in the lawyer's office were over.

Giving up the law, he became a city missionary at Glasgow, in connection with the Greyfriars United Presbyterian Church, and did good work there. But his thoughts were directed to the foreign mission field by some conversations he had with the Rev. Dr. Turner of Samoa, and, recalling the vow he had made when a lad in the Sunday school, he resolved to carry it into effect. He offered his services to the London Missionary Society, was accepted, and underwent a course of training at the Society's college at Highgate. He was then appointed to Raratonga, in the Hervey group of the South Sea Islands. In November 1865 he married Miss Jane Hercus, and embarked with his wife a few months later on board the new missionary ship, *John Williams*, for Raratonga. There, after various detentions, they arrived in May 1867.

Mr. Chalmers' stay at Raratonga lasted ten years—years of earnest and successful work among a people whose minds had already been so far prepared to receive gospel truths that there was a church and a native pastor at five of the villages or settlements when

Mr. Chalmers appeared on the scene. He established an institution for training more native teachers, and for educating men of position, on the different islands; he held classes and meetings; he carried on a printing office; he preached, visited, and travelled; he gave instruction in the building of houses and the making of furniture; and he had the satisfaction of seeing considerable progress made by a people who had only recently emerged from heathenism and were still addicted to some of their old heathen practices. Among other things Mr. Chalmers established a volunteer corps for the young men, in order to provide them with the employment and physical recreation of which there was a great lack. They enjoyed very much the exercises and the drill, and did not at all object to the Bible or educational class that followed.

All this, however, was not sufficiently laborious work for Mr. Chalmers. He had heard that the New Guinea coast was far "darker" than Rarotonga, and, greatly as he liked his work in the Hervey group, he had offered as far back as 1869 to go to New Guinea and undertake pioneer missionary work there. Two years later British New Guinea was included in the field of operations of the London Missionary Society, and some teachers from the Hervey group were sent there. In 1874 Dr. Lawes and his wife and son settled at Port Moresby, and in 1877 Mr. Chalmers

was also invited to transfer his labours to New Guinea. Thither he went, and New Guinea was to be the scene of his labours for the rest of his days.

Even in the seventies the New Guineans were not at absolutely the lowest stage of civilisation. A less intelligent race than the Polynesians, they were higher in the social scale than the aborigines of Australia; for not only had they settled villages and towns, with large and substantially built houses, and a code of unwritten laws of their own, but they carried on a regular trade among themselves, bartering rudely made pottery for sago, and making periodical coasting journeys in the interests of their trade, the rules and regulations of which were very clearly defined. On the other hand, they were, as Mr. Chalmers wrote, "a people sunk in crime that to them has become a custom and religion; a people in whom murder is the finest art, and who, from their earliest years, study it. Disease, sickness, and death have all to be accounted for. They know nothing of malaria, filth, or contagion. Hence they hold that an enemy causes these things, and friends have to see that due punishment is made."

When the missionaries landed they found that, beyond their trade, the natives lived merely to fight, and the only skill they showed besides cultivating the soil was in the direction of making weapons of war. On one occasion an entire tribe was killed off

by another tribe because of a quarrel which began about a pig. Raids, massacres, and head-hunting were ordinary incidents of life in New Guinea, and every victory was celebrated by a cannibal feast. The excuse is sometimes made for cannibals that they are impelled to their horrible practices from want of food or out of regard for superstitious customs. The New Guineans were so far honest as to attempt no such excuses as these. They frankly declared that they ate human flesh because they liked it.

To guard against the raids which were the prelude to all this cannibalism, the tribes living along the coast built their houses on piles driven into the sea, and approached them by a trestle platform, so that their villages looked like what the lake-dwellings in Switzerland in pre-historic times are supposed to have been. In another respect the people might be regarded as still living in the Stone Age, for their canoes were hollowed out with adzes made of sharp stone. The weaker tribes, driven into the interior by the stronger ones, who wanted the coast for themselves, constructed houses in the tree-tops, keeping there large bundles of spears and large stones suitable for throwing in case of attack.

Such were the people among whom Mr. Chalmers went as a teacher and peacemaker, and not only did

he visit them with absolute fearlessness, but he speedily won their regard, and became the most influential man in the whole of British New Guinea. One of the most important features of his work was to train Polynesian or other native workers, and establish them in mission stations at various points; but he would not send one of them to a town or village until he had first visited the place himself, and seen whether or not a mission might be established there. His own life was thus often in danger, but of this he thought nothing, and only on one occasion, even when going among the most savage of the tribes, did he carry anything more than a walking-stick. A single incident will suffice to show the bravery of his disposition. He received a report in 1880 that the natives at Motu-motu, under an old chief named Semese, intended to make a raid on Port Moresby, in order to kill both himself and Rustoka, the native teacher, and then to have a general massacre, so as to pay off some old scores. As soon as possible Mr. Chalmers got a boat's crew together, and set out for Motu-motu, much to the alarm of the friendly natives of Port Moresby, who expected never to see him again. On landing Mr. Chalmers went to Semese, and not only won the favour of the chief, but persuaded him to return to Port Moresby, and make his peace with the people there.

Mr. Chalmers, or "Tamaté," as everybody called him, was of opinion that cannibals were, as he put it on one occasion, "not at all a bad lot," and he regarded the inhabitants of New Guinea as "semi-civilised savages, very impulsive, easily won, who can do terribly cruel things, but who can be as tender and sympathetic as the most civilised lady or gentleman." "Give the native of New Guinea a chance," he further declared, "and I feel sure he can be what is called 'raised.'" The results of his work showed that this conviction was well founded. As the mission houses were set up the cannibal ovens disappeared, and the greatness of a chief was no longer reckoned by the magnitude of his collection of skulls. Rival chiefs, who had previously met only to wage war against one another, now sat side by side to hear the Word of God, and men and women who at one time had sought the missionary's life now did all they could to help him in every possible way.

To the remarkable influence thus secured by Mr. Chalmers among the New Guineans striking testimony was borne by Dr. Doyle Glanville, on the occasion of an address on "New Guinea — Past, Present, and Future," given by Mr. Chalmers at a meeting of the Royal Colonial Institute on 11th January 1887. Dr. Doyle Glanville had been an officer of the Special Commission which, following on the proclamation of

the British Protectorate over the un-annexed part of New Guinea in November 1884, was sent there the following year to inquire fully as to the resources, etc., of the new Protectorate. Mr. Chalmers took part in the work of the Commission, and, in referring to the great value of the services rendered by him, Dr. Doyle Glanville said :

“ Whatever might be its origin, ‘Tamaté’ meant a great deal. If I went to the natives and said, ‘Who is the king?’ they would say ‘Tamaté.’ If I said ‘What is *maino*?’ (*maino* meaning peace) they would say ‘Tamaté,’ because Tamaté settled their little quarrels, soothed their strife. Was it not Tamaté who turned their quarrels into peace? Had not Tamaté been known, when two opposing tribes were approaching, to go and take the two hostile chiefs like two turbulent children, and insist upon their being friends and not fighting? And so with Her Majesty’s Special Commission. Whatever had to be done, from the Special Commissioner downwards, the first question was ‘Where is Tamaté? What has Tamaté to say about it? Ask Tamaté.’ I assure you that, had it not been for that gentleman, whatever work has been accomplished on the expedition could never have been done without his valuable help. His profound knowledge of the native character, his wide experience, and his great tact placed us on a footing with the

natives that otherwise would have been impossible. He taught us how to understand the natives and their little peculiarities and ways, and he taught them how to understand the members of the expedition, and what were the motives that prompted them to visit them. . . . In all our travels we could not fail to be much impressed by the civilising effect of missionary labours upon these untutored people, and it is only by visiting such countries as New Guinea, far away from the haunts of white men, that one can appreciate the magnitude of the great work which is accomplished by those self-sacrificing heroes—such men as Mr. Chalmers and Mr. Lawes. They toil amid daily risks—risks arising not only from the natives themselves, but from the effects of the climate, which is always unhealthy, and very often fatal. I have known them perform prodigies of fatigue and hard work, when food has been so scanty that under the most favourable circumstances it would not be sufficient to maintain a proper standard of health. . . . Wherever the power of the missionaries is felt, there law, order, and peace are established. Human life and property become more secure, and it can always be laid down as a rule that wherever there is a mission station in a village, even if only presided over by a native teacher, there the traveller, whether he be European or native, may always safely venture.”



On the same occasion Captain W. H. Henderson, R.N., commander of H.M.S. *Nelson*, who assisted at the proclamation of the Protectorate, said of Mr. Chalmers: "The name by which he is known along the coast, Tamaté, is talismanic, and gives one a safe-conduct where, but a few years ago, it was unsafe for a white man to venture. Mr. Lawes and Mr. Chalmers are supreme along the eastern half of the southern shore of New Guinea. Without their aid the stranger going there is helpless."

More striking proof than this of the fitness of Mr. Chalmers to be regarded as a master of men could hardly be required, nor is it necessary, perhaps, in this place to enter into details as to the valuable exploration work done by him in New Guinea—work which well entitles his name to rank among those of the greatest of our missionary-explorers. That he should have fallen a martyr to the savagery he had laboured for so long to overcome, and by which he had so often been threatened, was a source of profound grief to those who had known and appreciated the true nobility of the man and the greatness of his labours. His zeal for the work had taken him among a remote tribe where the name of "Tamaté" had not yet acquired its magic influence, and British New Guinea lost the most noteworthy personage who has yet dwelt upon her shores.

## A MASTER OF CANNIBALS

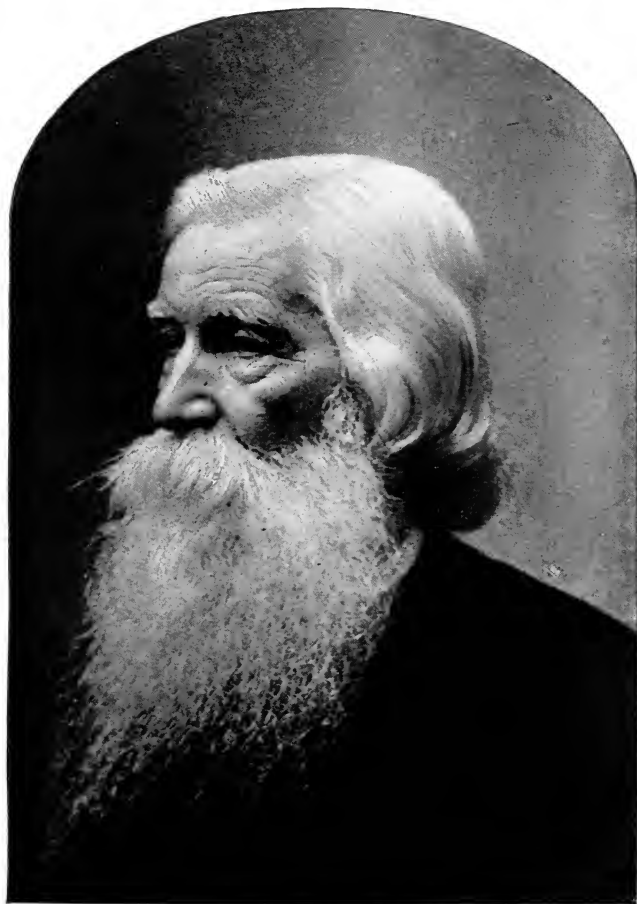
**I**N a humble cottage situate in the parish of Kirkmahoe, near Dumfries, and tenanted by a stocking manufacturer in a small way of business, there was born, on 24th May 1824, a child who, under the name of John G. Paton, otherwise Dr. Paton, was to become one of the most famous workers in the foreign mission field. The father was a man of deeply religious feeling, who had had his own aspiration to enter the ministry; but circumstances compelled him to keep to business, and, with a family of eleven dependent upon him, he had to work hard to provide them with the bare necessities of existence. Beyond this there was little else that he could do for them than implant in their minds a reverence for sacred things which was to bear abundant fruit later on, and prove of infinitely more value than the greatest of worldly gifts could possibly have been.

Up to the age of eleven John Paton received a sufficient degree of schooling to arouse in him a sincere appreciation of and a keen desire for knowledge; but the circumstances of the family rendered it desirable that he should qualify himself to help his father in the

business. It was a laborious life that he now led, for he worked from six in the morning until ten at night, with an interval of only two hours, altogether, for meals. Yet, hard as he worked, he still found time at odd moments to look into his school books, and to make such progress as he could in those rudiments of Greek and Latin which he had already acquired. So far, indeed, had he inherited his father's aspirations, and so far had he profited by the Christian spirit which dominated the household, that as he worked away at the stocking-frames the resolve gradually fixed itself in his mind that he would himself become either a minister or a missionary.

There was no immediate prospect of his being able to realise his aspiration; indeed, judging from the then aspect of things, there was no prospect at all. On one occasion, at least, the family were plunged in the deepest distress by the failure of the potato crop, the badness of the other crops, and the famine price of food. The father's limited means, too, made it hopeless to think that he would be able to pay for John's training. The lad, therefore, early saw that he must depend on himself for his advancement in life. From his scanty earnings as a stocking-maker he saved up sufficient to allow of his going for six weeks to the Dumfries Academy, but his small supply of money was soon exhausted. To earn more, and thus to continue

his education, he got an engagement with the officers of the Ordnance Survey then in that part of Scotland, walking four miles to their headquarters every morning, and the same distance back at night. The way in which he devoted every moment of his spare time to study attracted the attention of the officer in command, who wanted him to go to Woolwich for seven years and be trained, promising to arrange the matter for him ; but when the boy declined to bind himself for so long, and announced that he intended to become a missionary, he was paid off, and sent about his business. He next took an engagement in the harvest field. When this was over he went to Glasgow, and was engaged as a district visitor and tract distributor for the West Campbell Street Reformed Presbyterian Congregation, at a salary of £25 a year, with the privilege of receiving one year's training at the Free Church Normal Seminary. By teaching in a small school at Girvan he managed to save £10, and was enrolled as a student at the Seminary ; but at the end of the session his funds were exhausted, and once more he had to look out for a means of replenishing them. To this end he accepted a situation at the Maryhill Free Church School. He had literally to fight with the rowdies attending the school ; but as soon as he had reduced what had previously been chaos to order the trustees thought they could venture on engaging a



JOHN G. PATON, D.D.

*From a Copyright Photo by Elliott & Fry.*



teacher with "higher qualifications," and so dismissed him. At the age of twenty-three he joined the Glasgow City Mission, filling up all his available leisure with studies, first at the University of Glasgow, and afterwards at the Reformed Presbyterian Divinity Hall. His long-cherished aspiration for missionary work now assumed the more concrete form of a desire to go to the New Hebrides, and in 1856 he offered himself for the New Hebrides Mission. He was accepted, and underwent the special training necessary for the work.

It was on 30th August 1858 that Dr. Paton and his first wife (for he has been twice married) arrived at Aneityum, one of the most southerly of the islands forming the New Hebrides group, and the one where a mission station had already been established and some remarkable changes brought about on the minds of the natives in a comparatively short time by Dr. Geddie and Dr. Inglis. But the next island on the north, Tanna, was to be the scene of Dr. Paton's labours, and thither he proceeded at the earliest possible opportunity. On his arrival he did not know a single word of the language of the islanders, and the conditions under which he started building his house were rendered the more depressing by the news that a native fray had just occurred, and that the bodies of five or six men had been carried off by the conquerors, and cooked

and eaten at a spot less than a mile away from the place selected for the site of the mission house.

But this event was found to be only an ordinary incident in the lives of the islanders. They were not only savages, but cannibals of the deepest dye. Their language had not even the rudiments of an alphabet; they had countless superstitions and heathen practices; they made idols of almost everything, from sun and moon and volcanoes down to rocks and trees and insects; they always strangled a man's widows the moment he died, so that they should attend on him in the other world; and it was the recognised custom that they should cook and eat the victims of the battles they were almost incessantly getting up.

Such were the people whom Dr. Paton hoped to win over to Christianity and civilisation. He stopped on the island four years, and when one reads the full story of his experiences, as told in his autobiography, one marvels how he managed to persevere in his almost heartbreaking work so long, and how he escaped the numerous attempts made on his life. Mrs. Paton soon fell a victim to the climate, and Dr. Paton himself had fever and ague fourteen times, until he removed the mission station to a hill 200 feet above the shore. But his greatest dangers were from the people themselves. They were far from devoid of the religious instinct, and, as Dr. Paton acquired their language, they were



interested in hearing of the God who was greater than their gods. They even got to like Dr. Paton. But when he tried to induce them to abolish their heathen practices they turned against him at once, and from that moment not only the threats against his life, but the actual attempts to kill him, were almost incessant. The hostility was increased partly by the belief that Dr. Paton was responsible for all the droughts and other troubles that had come upon the islanders, and especially by the action of the sandal-wood traders, the "white-skinned savages," as Dr. Paton calls them, whose ill-treatment of the natives excited their animosity against whites without distinction. On one occasion, for instance, a trader who wanted to clear off the natives altogether, so that white men could take possession, deliberately introduced measles on the island, thus causing the death of one-third of the entire population.

Dr. Paton stuck to his work with marvellous patience for some time, and on several occasions his life was saved only by his trusty watch-dogs attacking his would-be murderers at the critical moment. At the end of four years he found himself forced to leave the island, though it was only with great difficulty he managed to get away from those who wanted to kill him. Rescued at last by a passing steamer, he landed at Aneityum in the spring of 1862.

But though his work had, apparently, been a failure, he was not disposed to give it up. He had saved himself from a martyr's death in the belief that he might still be of use to the mission cause, and though he had lost at Tanna all his belongings, except a Bible and a few translations, he was quite willing to start afresh on one of the other islands. After a visit to Australia and Scotland, in order to raise money for a mission ship, he returned to the New Hebrides, and recommenced his mission work at Aniwa, an island only seven miles broad by two miles long, which was to be his station for the next fifteen years.

At Aniwa Dr. Paton was not entirely free from dangers such as those that had surrounded him at Tanna, but he had the satisfaction of seeing good and lasting results follow from all his toil and patience. How he eventually "broke the back" of heathenism in Aniwa, and established his reputation as a master even of savage men, is worth repeating.

There being no permanent supply of fresh water on the island, Dr. Paton resolved to sink a well, and he told the chief what he proposed to do. The chief replied, "Oh, Missi, your head is going wrong. Don't let our people hear you talk about going down into the earth for rain, or they will never listen to your word again." Dr. Paton began the digging himself, the chief and his people watching him anxiously, and

declaring, "We expect if you reach water to see you drop through into the sea, and the sharks will eat you." He induced some of the natives to help him, after a time, and eventually he reached water. Much to his joy it was fresh, and not merely sea-water. He handed some of it to the chief, who first gazed on it with superstitious fear, shook the vessel containing it in order to see if it would spill, and then ventured to taste it. "Rain! rain!" he shouted. "Yes, it is rain! But how did you get it? Ah, Missi, wonderful is the work of your Jehovah God. No god of Aniwa ever helped us in this way. The world is turned upside down since Jehovah came to Aniwa. Will it always rain up through the earth, or will it come and go like the rain from the clouds?" Dr. Paton told him it would always be there, and that all the people could use it.

The marvel of the thing removed any lingering doubts the old chief might have had, and he resolved to be a Christian right off. He asked the missionary if he might himself preach the sermon next day, and he received ready assent. He discharged the duty of preacher accordingly, and in the course of his sermon he said: "We have laughed at other things the Missi told us, because we could not see them. But this day I believe that all he tells us about his Jehovah God is true. For to-day we have seen the

rain from the earth. . . . Henceforth I am a follower of the Jehovah God. Let every man that thinks with me go now and fetch the idols of Aniwa, the idols which our fathers feared, and cast them down at Missi's feet."

This the people did, and for many days after they were bringing in their gods of wood and stone, and piling them up in heaps. Those of wood were burned; those of stone were either taken out to sea and thrown overboard, or buried in deep holes—lest by chance they should return to revenge themselves on the people who had discarded them.

And thus it was that the gospel was established at Aniwa.

In 1884, at the age of sixty, Dr. Paton paid another visit home to raise funds for the expenses of the mission. He asked for £6000, and so well did he plead, and so greatly did he interest people in the work, that he raised not merely £6000 but £10,000. From 1886 to 1892 he spent most of his time in the various colonies of Australia, with occasional visits to the New Hebrides; and in 1892 he was sent on a journey round the world to protest against the terrible evil caused by the sale of intoxicants, opium, firearms, and ammunition to the natives by European traders. On this occasion he raised a further sum of £12,000 for the mission. He returned

to Victoria in the autumn of 1894 to continue the work of organisation, but he was to make still another journey home, this time in the hope of raising £7000 in order to place more missionaries in the New Hebrides. Twenty-two of the islands, he told at meetings he addressed in London, were occupied by the missionaries; there were 18,000 converts and 300 native preachers and teachers, and the Bible had been translated into twenty-two of the languages spoken by the people. On 5th June 1901 there were two further meetings in London, this time in Exeter Hall, where Dr. Paton not only once more pleaded for his cannibals, but said "farewell," in order that, though then in his seventy-eighth year, he might return and devote to their welfare the strength and energies still left to him.

At such an age, and after spending over forty years in the mission field, Dr. Paton would have been warranted in retiring from active duty. But there were still some islands that had no missionaries; there was still some of the old savagery left, in spite of the great changes brought about, and Dr. Paton would not give up the work so long as he could still take his part in the conversion of "the darkest place in the world."

## TRIUMPH OVER PHYSICAL DEFECTS

**M**ANY illustrations have been given in the preceding pages of persons who have triumphed over lowly birth and humble conditions in the success in life which they have gained for themselves. But there is another class of triumphs, in which those who have struggled have been handicapped by grave physical defects; and to such individuals as these reference should also be made.

Among blind men the two most noteworthy examples of recent times have been those of the late Mr. Fawcett, whose successful career as Postmaster-General is so well known that it need not, perhaps, be detailed here, and Dr. F. J. Campbell, whose work for the blind will be related later on. One or two lesser known illustrations might be mentioned as showing that loss of sight does not necessarily deprive a man of his chances in life.

The members of the Royal Commission on the Blind, Deaf, and Dumb, which sat some years ago, found in Paris a sculptor who became blind at the age of twenty-one while learning his profession, yet continued it all the same, carrying off medals and

distinctions from sighted competitors. Then they were told of a wool-dealer who, after his loss of sight, was a better judge of wool than before. During a visit to Melbourne in 1881 he bought more than £150,000 worth of wool, doing all the business his purchase involved—banking, exchange, and shipping—without the aid of a broker. Another case was that of a Town Councillor and Poor Law Guardian at North Shields who once earned £200 a year as a “night-caller,” receiving sixpence per week each from people who had to rise at any hour between midnight and six in the morning to follow their employment. Still more remarkable was the case of a practising solicitor. He lost his sight at fourteen, and did nothing until he was twenty-one. He then went to a college at Worcester, and thence to Oxford, where he took his B.A. and B.C.L., proceeding afterwards to M.A. and D.C.L. He was articled to a firm of solicitors, was admitted in 1879, took an office and started with one clerk, succeeding so well that when he gave evidence before the Commission he employed a staff of no fewer than ten clerks.

Far more striking, however, than any success attained by blind persons in the way of overcoming physical defects was the case of the late Mr. Arthur Kavanagh, who has well been described as one of the most remarkable men of the century. He was a

member of a family of high social distinction in Ireland, his father being a descendant of the Kings of Leinster, while his mother had been Lady Harriet Margaret Le Poer Trench, daughter of the second Earl of Clancarty. But Mr. Kavanagh was not much more than the trunk and head of a man, for the lower limbs came no farther than the knee, and the arms came only as far as the elbow; though these upper portions of ordinary arms were unusually long, so that he could fold them across his chest.

One would think there was not much chance in life for a mortal so imperfect as this; but in the case of Mr. Arthur Kavanagh the question was not what he could do, but what there was that he could not do. He rode after the hounds, being strapped on a chair saddle, and having the reins round the stumps of arms, which, by long practice, he had made supple and strong, and he took fences and walls as boldly as any of the other huntsmen. He could drive a pair of spirited horses at full speed, managing the reins as skilfully as if he had had fingers to manipulate them, and he could even use a whip. He wrote a clear and bold hand, which was far more legible than that of many ordinary writers. He was a good shot, carrying a gun without a trigger guard, resting it upon his left arm stump, and jerking the trigger with his right. He became an enthusiastic yachtsman. He was an expert



angler, fishing from a boat or from horseback ; and he was a fair amateur draughtsman and painter. He was carried from place to place on the back of a special attendant, though with the help of an ingeniously contrived chair he could move about a room by himself. Of mechanical appliances as substitutes for arms, hands, and feet he tried a variety, but could not get on with any of them. In his earlier days he was quite a traveller. Part of his education he received at Rome, and he afterwards went to Egypt with his mother and a tutor, ascending the Nile as far as the third cataract, and subsequently visiting Jerusalem and Beyrout. Returning to Ireland in 1848, when he was seventeen years of age, he acted as volunteer scout during the Smith O'Brien rebellion, riding at times for miles on horseback in the dead of the night. Between his eighteenth year and his twenty-first he made a journey with his eldest brother through Persia, where he became ill, and was nursed in the harem of a Persian prince, by whom they had been kindly received. From Persia they went by way of Bushire to India, where Mr. Kavanagh had some tiger-shooting, bringing down a lot of big game. On the departure for Australia of his brother, who had been attacked by consumption, he had the experience of having to support himself, for his money ran out, and he earned some by carrying official despatches in

the Aurungabad district. He afterwards obtained a post in the Survey Department of the Poona district.

In 1853 he returned to Ireland, and succeeded to the family estates, in the management of which he showed great activity, soon acquiring the reputation of a model landlord. He himself drew the plans for the partial rebuilding of some of the villages on the estate, and the plans were so well done that they gained the Royal Dublin Society's medal. As a magistrate he sat daily under an old oak in the courtyard of the family mansion, Borris House, County Carlow, and he not only administered justice there but arranged marriages, settled disputes, and was the friend and adviser of the people for miles around. He was himself by this time a married man, his wife being a distant cousin. The marriage was a very happy one. Several children were born, and he lived to see his grandchildren around him.

In addition to being a Justice of the Peace for County Carlow, Mr. Kavanagh held office as High Sheriff and chairman of a Board of Guardians. But this was not all, for he represented County Wexford in Parliament from 1866 to 1868, and County Carlow from 1868 to 1880. Such a member as Mr. Kavanagh had never been seen in the House of Commons before, and when he first entered the House there was quite a rush of members to examine his signature. He occasionally spoke from behind the Speaker's chair,

and his speeches never failed to make an impression. He sat on the Bessborough Commission, was a secretary of the Irish Land Committee, an active member of the Property Defence Association, and he founded in 1883 the Land Corporation. He was sworn of the Irish Privy Council in 1886.

Possessed of an indomitable resolution and perseverance, Mr. Kavanagh wanted to do everything that anyone else could do, and he not only tried to cover the whole range of human effort, but surpassed in energy and even in skill many of those around him. There was, however, a limit to his powers. His activity was certainly marvellous, but it involved a heavy strain on his physical strength, while in his later years he had much anxiety to bear. He eventually broke down under an attack of pneumonia, and died in London on Christmas Day 1889.

If there be any case on record which surpasses the illustration just given of triumph over physical difficulty it will be found in that of the late Mr. Walter Wren, the famous Indian Civil Service tutor. In the one case there were physical defects which did not prevent the living of an active, varied, and, on the whole, a healthy and fairly enjoyable life. In the other there were sufferings of the most terrible nature, rendering life itself, at times, an almost unbearable burden.

Walter Wren entered Christ's College, Cambridge, in the early fifties, a tall and strong-looking young fellow of great promise, who had done well at the Grammar School, Buntingford, Hertfordshire, and seemed likely to do well in the world that lay before him. But while he was still a graduate an accidental injury he had received in his school days developed into an incurable spinal affection. He had to leave off reading for Honours, and content himself with a pass degree, though it was eight years or so before he could secure even that. The disease made rapid progress, and he found himself starting life permanently crippled, and a victim to pains that often amounted to actual physical torture. He knew that his condition was hopeless, but he would not give way to despair. He resolved to maintain himself, and that in a way which must make the severest tax on his energies.

Doomed to spend all his time night and day for years to come on an invalid couch, on which he was wheeled from one room to another, he became a "coach" to young men who were preparing for the various competitive examinations for posts in the public service, supplying to them a careful individual training not to be expected in the public schools. He was unable to go to the young men, but they could come to him, and so long as he had an active brain, and was not absolutely overwhelmed by his sufferings, he

thought he could just as well teach from an invalid's couch as from a professor's chair. By causing him to concentrate all his thoughts on this one form of occupation open to him his physical condition should even help him to secure not only success but a fortune. And both success and fortune came to him in due course. There was then a decided opening for such a "coach" as he proposed to become, while he was quick in discerning the capabilities of young men, and spared no pains in getting them to fix their whole attention and their whole energy on the particular subject they were to take up. What they did they had to do thoroughly, and he used to boast that if any pupil of his said he knew a thing one might be certain that he did know it. He filled his pupils with enthusiasm for their work. He did not believe in merely cramming them for a special occasion; he wanted the knowledge he planted in their minds to stop there and develop.

As the good results of his system became known he had so much patronage that he could make a speciality of preparing for the Indian Civil Service, and this he did for the remainder of the forty years over which his activity as a "coach" was spread. For a long time he worked alone, but afterwards he surrounded himself with some of the best men that Oxford and Cambridge could produce. The business assumed such dimensions that during the greater part of the forty years in

question about fifty per cent. of those who entered the Indian Civil Service, and went out to occupy important public posts in some part or other of the great Indian peninsula, had received their final training at Mr. Wren's house in Powis Square. Both in his exact knowledge of what was wanted for the Indian Civil Service and in his art of preparing for it Mr. Wren was unsurpassed, and his establishment was well spoken of as "one of the prominent institutions of the educational world."

As time went on Mr. Wren was able to leave his invalid couch, and move about on a couple of walking-sticks. His strong political views and his great natural energy even led him to aspire to political distinction. He stood for the borough of Wallingford at the General Election of 1890, was returned, and took his seat, but only for a few days, for he was unseated owing to an act of bribery committed by one of his agents. He afterwards contested Wigan and North Lambeth, but without success, though he was elected for Bethnal Green on the first London County Council. With increasing years his maladies grew more acute. He struggled against them with heroic determination, but it became evident that they were gaining the mastery, and he had to leave the teaching more and more in the hands of others, spending his time on the south coast, the victim of various complications under which his strength was slowly ebbing away.

The end was both tragic and pathetic enough. His fourth daughter was to be married to Mr. Thomas N. Taylor, Fellow of Caius College, Cambridge, his colleague and successor, and on the day of the wedding Mr. Wren was just on the point of leaving the house to join the party at the church when he was seized with a paralytic stroke. The guests were not told what had happened—only that “Mr. Wren did not feel well, and the doctor thought he had better not see anyone.” So the wedding was celebrated, with the thoughtful doctor attending his unconscious patient, whom no one might see; and unconscious the patient remained until death put a merciful end to his lifelong sufferings.

“His career,” said *The Times*, in its obituary notice of Mr. Wren, “will be remembered as a standing proof that no amount of infirmity and disease can prevent a clear intellect and a strong will from making life honourable, prosperous, and useful to the world”; while the late Sir Walter Besant, in a touching letter to the same journal respecting his old friend, said: “I have never known, nor have I ever read of, a life which contained so much physical torture and so much bravery. I have never known in man a spirit so indomitable and a resolution so unconquerable. I do not know of any instance in which so much has been done against odds so fearful, under conditions so grievous.”

## SELF-HELP FOR THE BLIND

ON the 20th of January 1871 there was held in London a tea-party for the blind which was destined to lead to greater results for that section of the community than any other similar gathering either before or since. In itself it was quite an ordinary sort of blind-man's tea-party. The guests consisted almost exclusively of sightless individuals who were supported by charity, and their entertainers were ladies and gentlemen who had thought it an act of charity to invite them to a social entertainment, and throw a ray of happiness into their presumably miserable lives by means of a tea, with music and speech-making to follow. For in those days this was considered to be just about all that one could do to make the blind happy. It was still taken for granted that the loss of sight rendered a person practically helpless and hopeless. That the blind should be left in a condition little if any better than one of dependence on charity was regarded as quite in accordance with the inexorable law of fate, and a sympathetic public thought it had done all that lay within its power when it gave, as an act of



charity, money for their support, and added thereto an occasional tea-party just to keep up their spirits.

But at the gathering in question an American visitor, Dr. F. J. Campbell, himself a blind man, was struck by the expressions of gratitude on the part of certain guests who made speeches in acknowledgment of what had been done for them, and he remarked to the person sitting next to him, "I am glad to hear that the blind people in England are all so happy and contented."

The man whom he addressed disclaimed any such idea. They merely talked that way, he said, because if they did not they would get nothing at all; and he speedily convinced the American that, instead of their being happy and contented, they were just the reverse, inasmuch as society gave them no real chance of making up for the loss that had befallen them. "They come here," he went on, "in their silks and satins, and think they are doing their duty when they dole out a little charity, and if we didn't flatter them they would not do even that. For my part I want none of their charity. Give me a little training and a chance to work, and then I could keep myself without any swells coming to pity or patronise me."

Now it so happened that Dr. Campbell had already devoted much thought and energy to improving the welfare of the blind by giving them, not alms and tea-parties, but as large a measure of self-reliance and

independence as circumstances would permit. He was then on his way back to the United States, and had already taken his passage, the visit to the tea-party being simply a casual one, filling up a spare evening during his stay in London. But the words of his discontented neighbour at the tea-drinking made so deep an impression on his mind that he could not sleep that night. In the morning he went to the shipping agents, and announced that he should defer his voyage. God helping him, he said to himself, he would do what he could to bring about such a change in the conditions of the blind in Great Britain as would give them a better chance in life than they seemed to have then.

Dr. Campbell had had a remarkable career. The son of a farmer in Franklin County, Tennessee, he was born there on 9th October 1832, and at the age of three years and a half lost his sight owing to a thorn from an acacia striking one of his eyes while he was playing in a yard where his father was cutting down some trees. The injury was badly treated by the doctors, the inflammation which set in spread to the other eye, and total blindness was the result. There had been some hope that the sight of the second eye would be preserved; but one night as the mother was carrying the little sufferer up to bed, and, as usual, bade him look at the stars from the veranda, the child asked her, "Why is it so dark? Why doesn't God

light up the stars for your little boy?" Then the truth came home to her that the child would see the stars no more, and the grey-haired man of to-day still remembers how the tears fell upon his face as the disconsolate mother bent over him amidst her sobs.

But, though deprived of sight, the boy as he grew up acquired an indomitable energy, both mental and physical. He had a passion for study, alike for its own sake and because he was resolved to become a teacher; and this passion he followed up in spite of what might have been regarded as insurmountable difficulties. At the age of twelve, though he could not distinguish one note from another, he announced that he intended to learn music. The other boys laughed at him, while his seniors declared that he would never be able to learn, that it would be a waste of time and money to give him lessons, and that he would have to be satisfied with basket or brush making. But he persuaded one of his schoolfellows to give him some lessons, and so persevering was he that within three months he could play better than any of them, and within fifteen months he had won a medal for pianoforte-playing. At one time, in fact, his excessive zeal in following up his studies led to a complete break-down in his health, and he was sent away to the mountains, where he spent a period of three months mainly in climbing cliffs and felling trees. He also rode about quite fearlessly on

horseback, crossing streams and torrents to which even a sighted person might not have cared to trust himself. But in his case such exploits were invaluable, alike because they increased his self-confidence and because they convinced him of the importance of that physical activity which constitutes, in his opinion, the best way of combating the condition of lethargy into which the blind are only too apt to fall.

In 1858 he became musical director at the Perkins Institution for the Blind, in Boston, and was a most enthusiastic teacher, believing, as he did, that music in its various branches offered the best possible occupation for the blind. In 1869 he came to Europe in order to learn the methods of teaching music followed in Leipzig and Berlin, and it was when on his way back to the United States that he was taken to the tea-party in question by a stranger with whom he happened to get into conversation at his hotel.

On inquiring more fully into the condition of the blind in London, Dr. Campbell found that out of a total of 3150 persons known to be blind no fewer than 2300 were being kept by charity. To his mind there seemed to be something radically wrong in the fact of so many blind being left in a condition of semi-pauperism; and, after talking matters over with Dr. Armitage, who had devoted much attention to the subject, he decided to stop a year in London, with the idea of

establishing an improved system of teaching music to the blind. To this end a training college was necessary, and an appeal was made for funds. But at that time the British public seemed to regard as a mere visionary an American who talked about making the blind self-supporting otherwise than by basket-making or brush-making, and spoke of providing them with a musical capacity whether they had one or not. There was thus comparatively little response to the appeal, and the whole prospect became most discouraging. At the end of eight months it seemed to Dr. Campbell that his scheme was doomed to failure, and that the time had come for him to go back to his own country. One Saturday there was an apparently last talk with Dr. Armitage; on the Sunday Dr. Campbell thought the whole matter over as he sat in a quiet spot in Kew Gardens, and early on the Monday morning the work of packing was begun, in preparation for the return to America. But among the letters which Dr. Campbell received that very morning was one from Mr. William Mather, enclosing a generous contribution, and offering more, if wanted. The packing was stopped, the scheme was taken up afresh with renewed hope and courage, and in March 1872 the College was opened in three small houses near to the Crystal Palace, the first pupils being two little blind boys from Leeds.

The gradual building up of the institution which

thus so narrowly escaped not being started at all has practically been the work of Dr. Campbell's life. He had promised, in January 1871, to remain in London for twelve months, but London has been his home ever since, and how successfully he has worked is shown by the noble collection of buildings and their sixty acres of grounds which constitute the Royal Normal College and Academy of Music for the Blind at Upper Norwood, and have cost over £60,000.

Dr. Campbell is possessed of a strongly-marked individuality, and perhaps the characteristic which one notices most is that of invariable cheerfulness. His principle in life is that when a pupil enters the College he must leave the word "affliction" at the gates. Blindness may be a drawback, but he will not have it regarded as a cause for despondency. So far as is physically possible, every pupil under his control must behave as a sighted person, and be treated as such. Instead of lamenting over his own blindness, Dr. Campbell seems to regard it as a circumstance which has given him a sort of mission in life, and has increased rather than decreased his possible usefulness to others, while there is no reason for supposing that his blindness has marred his own enjoyment of life. He tells how he once climbed Mont Blanc, and not only intensely enjoyed the scenery, as he realised it from the descriptions given to him by his companions, but

gained through his feat the best advertisement he ever had for his work for the blind. He talks, too, of bicycling, rowing, skating, and bathing, and he takes great interest in gardening, knowing almost as much about the flowers in the grounds as if he could see them. All these things are spoken of with a brightness and a spirit of appreciation that seem almost incredible; and one is inclined to think that, after all, Dr. Campbell sees a good deal better by means of his mental vision than the majority of people do with their physical vision.

Dr. Campbell's own cheerfulness is contagious, and work and recreation follow so closely the one upon the other, affording such constant occupation for their minds, that his pupils seem to have little or no reason, or even time, for dulness and despondency. He realises only too well how disposed the blind are to get into a state of apathy, and hence the very basis of his system of teaching is physical training. General knowledge, mechanical skill, and musical attainments are all admirable in their way; but in the case of the blind they require absolutely to be supplemented by an activity of the physical powers which will keep body and mind alike in a sound and healthy condition. So there is in the College grounds a gymnasium where, beginning with the finger tips, every joint or muscle of the body can be exercised and strengthened by means

of Swedish, American, and other contrivances, some of which are of the most ingenious description. Elsewhere in the grounds will be found a swimming-bath, a skating-rink, a pond for rowing, and cycles for four or eight, with which long country rides are taken, a sighted person acting as leader. Military drill and calisthenics are constantly practised, and much importance also is attached to singing, not only for its own sake, but as a means of strengthening the whole constitution. All this physical training has an important result in leading to active habits, and in inspiring the pupils with a self-reliance which makes them far better fitted for the battle of life than they would otherwise be. Combined with the indispensable physical training is the general and technical education, or the special musical instruction, by which they are to be qualified to take up situations or employments on leaving the College.

It is by this final test as to whether or not the pupils will be able to earn a living for themselves that the whole system must be judged. Happily the results have been most satisfactory. In a single year the certificated graduates who have left the College have earned as much as £26,000, and the happy position has been brought about that not only can they keep themselves, but many of them are able, by their earnings, even to support their relatives.



## THE LAME MAN WHO TRAVELLED

THE lion of the London season in the year 1864 was a certain Hungarian traveller, Armenius Vambéry by name, whose story of a wonderful journey through Central Asia from which he had just returned took the world by storm. In spite of his being lame he had gone from Constantinople to Persia, and thence, disguised as a dervish, had made his way by routes then unknown to Europeans through the deserts of the Oxus to Khiva, Bokhara, and Samarkand in Western Turkestan, and had returned *via* Herat, Meshed, Teheran, and Trebizond to Europe. He had passed safely on foot, on horseback, or on camels through countries steeped in fanaticism, where at that time his life would not have been worth a moment's purchase had the fact of his being a European been discovered, and he owed his safety mainly to his remarkable knowledge of Eastern languages and Eastern ways.

To-day a journey to Samarkand would count for nothing in the way of danger to Europeans, and for very little in the way even of "travel." Four years after Vambéry's arrival in London, Samarkand, which

had been a sacred city in the eyes of the Moslems since the eighth century, was annexed by the Russians, who garrisoned the place, and obtained paramount influence over the whole Khanate of Bokhara, with its area of about 90,000 square miles. Subject to the permission of the Russian authorities, travellers could thenceforward visit Samarkand without the old risks and dangers, while since 1888 the city has been connected by a line of railway, 900 miles long, with Merv and the Caspian Sea. Except for the passage on the Caspian by steamer, one can now make the entire journey from St. Petersburg to Samarkand by train. Across the plains and deserts where Vambéry defied robbers, was nearly swept away by the raging elements, braved hunger, and was reduced to the last stages of exhaustion by thirst, special water-trains and food-trains are run on stated days to take supplies to places where, in former times, many a traveller succumbed to privation. To-day there may be discomforts from the desert sand,—which penetrates everywhere, and covers everything, in the railway carriages,—from the excessive heat, and from the tedium of the journey; but the advent of the railway, coupled with the great political changes that have taken place, has entirely altered both the economic conditions and the conditions of travel in this part of Central Asia. New towns and large cities may be

found on spots where only mere villages stood when Armenius Vambéry made his famous journey.

When, therefore, we recall the fact of Vambéry being lionised in London in 1864 we must judge of that event by the circumstances then existent, and not by those that exist to-day. We must remember, too, that in the early sixties the world was very much interested in the political problems that were awaiting solution in the then little known countries of Central Asia. So the news that Vambéry brought back with him about the countries in question and the people who lived in them was especially acceptable, and so great was the desire both to hear the news and to see the news-bringer that not only did Vambéry have to tell his story to the most distinguished savants and politicians in London who were in any way concerned with Central Asia, and not only did he read a paper before the Royal Geographical Society, but "London society vied," as he afterwards wrote, "in the manifestation of all kinds of acknowledgment." Invitations to dinner-parties and to pay visits in the country literally poured in upon him, even from persons whom he had never seen or met in his life, and it happened frequently that he had to write thirty letters of refusal or acceptance in one day.

Yet the man whom society thus delighted to honour had begun life under conditions of the direst poverty. His early years were devoted to a grim fight with

want and privation in order that he could not only support himself but also acquire knowledge, especially as regards those linguistic attainments which have done so much to contribute to his fame.

What these attainments were like is shown by the fact that on one occasion he met in the *salon* of M. Guizot, in Paris, representatives of ten different nationalities, and conversed fluently with all of them in their mother tongue. He also tells the following story of an amusing trick he once played at Shiraz, in the south of Persia :—

“One day I happened to learn that a European, a native of Sweden, was living in the city and practising as a physician. My love of adventure immediately suggested to me the propriety of paying him a visit ; but I determined, as a matter of precaution, to keep up my incognito, and to appear before him as a dervish. When I entered his room with the dervish’s salutation of ‘Ya hu! Ya hakk!’ the good doctor immediately put his hand in his pocket in order to get rid of me by a gift of a few coins, the usual way of dismissing a dervish.

“‘What, dost thou give me money?’ I exclaimed. ‘I come to seek thy confidence, not thy money. I come from a far-off country. I am sent to thee by my chief to convert thee from the false religion that thou followest, and to lead thee to the path of the

true faith. I am charged by the Sheikh of Bagdad to make a Mussulman of thee.'

"The doctor, to whom such attempts at proselytising were by no means new, replied with a suppressed smile, 'This is all very fine, very fine, my dervish. . . . How canst thou prove to me that thy chief has sent thee to me, and that he can work miracles?'

"'Hast thou any doubt about it? One syllable from my master is enough to bestow the knowledge of all the sciences and languages of the world. Thou art a Frengi (European), and speakest probably many tongues. Put me to trial in any language.'

"The doctor stared at me, and I had some difficulty in retaining my reserve. Finally he addressed me in Swedish, his native language.

"'Swedish,' I said, 'I know that language as well as thou dost.' As a proof I recited to him a few verses from Tegnér's *Frithiof's Saga*, which, having been my favourite reading in my youth, came vividly back to my memory. The doctor's surprise knew no bounds. He began to try me in German, and to his astonishment I readily answered him in German too. He did not fare any better in his attempt to upset me with French and English; and, after having exchanged with him a few words in various languages, I returned to Persian, and recited very impressively a verse from the Koran for the good of his soul. The poor man

was utterly stupefied ; but when he began to guess at my real nationality I abruptly rose and made the following farewell speech : ' I will give thee time to reflect until eight o'clock to-morrow morning. Either thou wilt turn Mussulman, or thou shalt feel the power of my master.'

" I returned to my quarters ; but I had scarcely got out of bed the next morning when I found the good doctor waiting for me. His curiosity did not allow him to wait until I came. I continued the old game with him at first, but finally I dropped the mask, and told him who I was. The delight of the doctor was great, and we embraced as if we had been two brothers. ' I immediately thought you were a European,' he said, ' but your Persian talk made me doubt of it.' "

How Armenius Vambéry managed to secure this command of languages, and to become so famous a man, in spite of the adverse circumstances of his early career, is a story well worth the telling.

Born at Szerdahaley, Hungary, on 19th March 1832, Armenius Vambéry had three years' schooling, and showed such a remarkable capacity for learning that he was regarded as well fitted to become either a doctor or a lawyer. But the circumstances of the household rendered it impossible for him to secure the necessary training. The father had died when Vambéry was only a few months old, and the mother married again, hoping

to improve her worldly prospects; but the stepfather could not support a family that steadily increased in size, and the elder children had to become wage-earners as soon as possible in the interests of the younger. The domestic exchequer was, therefore, quite unequal to the cost of preparing Armenius for a profession, however promising he might appear, while he seemed to be not a little handicapped by his physical disability. At three years of age he began to suffer from a lameness which had been feared at the time of his birth, and for the next seven years he always had a crutch under his left arm when he walked. How his playmates jeered at him when he could not join in their races and games; how his mother would say, "Never mind that, my dear. If you grow older and stronger you will beat them all by force of perseverance. I am sure you will be in advance of them all"; and how, at last, as a lad of ten, he discarded his crutch, resolved to do without it, whatever the physical suffering involved,—all this has been well told by Vambéry in an "Introductory Chapter to the Boys of England" written by him for the story of his *Life and Adventures*. There, referring to the last-mentioned incident,—the discarding of the crutch,—he adds: "I relate this in order to prove to the young reader that a resolute will is able to accomplish even seemingly impossible things, and that through persisting in our decisions we nearly always reach the goal of our desires."

Of such a resolute will as this Vambéry was possessed both in his boyhood and in his manhood, and in the former, especially, there was abundant need for it.

Vambéry was twelve years old when he started earning his own living, and his first occupation was one that was strange enough for a boy. He was apprenticed to a ladies' dressmaker! It is not surprising to read that he soon got tired of such an occupation as this. He escaped from it in order to become "private tutor" to the son of the village innkeeper; though the position to which this dignified title may be given included not only the teaching of reading, writing, and arithmetic to the said son, but also the cleaning of the boots of the family on Saturday nights, and the giving of help in serving the guests. When he had saved eight florins he went to St. George, near Pressburg, and began his studies in the Gymnasium there. He had just sufficient money to buy the necessary books, and he found charitable people who helped him in many ways. Seven different families each gave him a free meal one day a week, adding one big slice of bread for his breakfast next day and another for his lunch, while he also got the left-off clothes of the wealthier schoolboys. Putting, as he says, "his whole heart in his studies," he made good progress, and was soon able to speak Latin with tolerable fluency. At the age of fourteen



he went on to Pressburg, where he resumed his studies and recommenced his struggles.

In order to earn a little money with which to keep himself during the three years he spent in the city, he either took situations in some menial capacity, or else gave lessons to women cooks, chambermaids, or others whose education had been neglected. "Every stone," he says, "of the pavement of that beautiful little town on the blue Danube, could it but speak, might tell some sad tale of misery which I endured there. But," he adds, "youth is able to bear anything and everything." Whatever, too, the privations might be, he was making great progress in his studies, for even at the end of his first term at Pressburg he was reckoned one of the best scholars. All his holidays he spent in wandering from place to place, seeing in this way Vienna, Prague, and other cities and towns, these rambles, which he always made on foot, in spite of his lameness, being a prelude to the great journey of later years. In 1847 he followed up the school work by private studies, reading all he could about foreign countries, and supplementing his knowledge of Hungarian and German, and his familiarity with Latin and Greek, by acquiring French and Slavonian. From French he proceeded to master the other languages founded on Latin, and then he learnt the languages derived from German, beginning with English,

and passing on to Danish and Swedish. In the same way he also took up the various Slavonic dialects.

The learning of these languages was a key that opened up to him rich stores of literature, and as he read of the glories of Asia he had an insatiable longing to go and see those glories, to mix with the people, and to study their habits, customs, and characteristics. As a preliminary step towards the realising of his desire he began to learn the languages of Asia, and already in his twentieth year he was able to read and understand, without the aid of a dictionary, a short Turkish poem.

Two years later, with the friendly help of Baron Joseph Eötvös, he embarked at Pest on a steamer for Galacz, *en route* for Constantinople. He landed in the Turkish capital without a single coin in his pocket. A fellow-countryman gave him a couch for a few nights, and Vambéry soon found a way of keeping himself by teaching, thus also gaining an easy and uninterrupted access to all classes of Turkish society. He thinks that he saw more of genuine Stambul life than anyone before him. All this time he was devoting every possible moment either to learning or perfecting himself in the languages of the different people he met with, or in acquiring knowledge as to the countries they came from. So much did he hear about Central Asia that the bare mention of the names Bokhara,

Samarkand, and the Oxus was sufficient to put him in "a fever of excitement." Not only, too, did he long to see those places for their own sake, but there were all sorts of subjects, linguistic, ethnographic, and so on, in which he was interested, that only a visit to those remote cities could throw light on.

From this time all his thoughts centred on the possibility of his being able to make the ardently-desired journey. Having been nominated a corresponding member of the Hungarian Academy, he returned to Pest in the spring of 1861, and there he secured a travelling stipend of 600 florins in silver. Three months later he was again in Constantinople. He went on with his teaching, but devoted all his spare time to mixing freely with people representing the different nationalities, so as to become acquainted with the colloquial languages of the countries on the Oxus. He fully realised that the projected journey, on which he proposed to start in the spring of 1862, would be an extremely hazardous one, and his friends did all they could to persuade him against it, especially as he was then doing so well in Constantinople; but he would not consent to forego his ambition to do a greater work than could be realised by a life of comparative ease in the Turkish capital. "What," he writes in a noble passage, "is our life worth if ambition is not known, does not exist, or has been blunted?"

Wealth, distinction, and dignities are gaudy toys which cannot amuse us very long, and of which sound common-sense must tire sooner or later. The consciousness, however, of having rendered to mankind in general a service ever so slight is a truly noble and exalting one; for what is there more glorious than the hope of being able to enrich, even by a single letter, the book of intellectual life lying open before us? Thus I felt, and thus I thought, and in these feelings and thoughts I found the strength to submit to trials and hardships a thousandfold greater than those I had been subjected to hitherto."

And certain it is that in enduring the trials and hardships which were in store for him he needed all the strength he could possibly summon to his aid. For the full story, however, of his experiences the reader may be referred to Professor Vambéry's own narrative. Here it must suffice to say that as long as he was in Persia he assumed the character of a genuine Turk and Effendi from Constantinople; but at Teheran he joined a company of holy or begging dervishes, and thenceforward he was one of them. What a very unsavoury lot of companions they made, and the personal discomforts which association with men who were ragged, dirty, and ill-smelling involved, had better be left to the imagination; but all this was nothing compared to the very great risk which

Vambéry ran of perishing from thirst in the desert, to the danger of being pounced upon by robbers, to the unspeakable tortures he suffered from the bite of a scorpion, to the nights when he dare not close his eyes for fear of being frozen to death, and, above all, to the constant peril of falling a victim to fanatical ill-will, in the event of his disguise being penetrated. Repeatedly he was suspected, but he always succeeded in allaying the suspicion, while he got accustomed, as he says, to braving any danger without losing his presence of mind. Napoleon III. once expressed surprise to him that one possessed of his slight and seemingly weak frame should be equal to the great hardships he had endured; whereupon Vambéry replied that "he did not walk in Central Asia upon his legs, but upon his tongue," as it was only his command of languages that rescued him out of the clutches of the Central Asian tyrants. His lameness, too, was even an advantage to him, for he passed among tribes eager to capture victims whom they could sell as slaves, and had Vambéry been free from physical defects he might on several occasions have swollen the number of such victims. But a man who was lame had no market value for the slave-raiders, and so they left him alone.

On returning to Hungary after the lionising he had received in London, and afterwards in Paris, Vambéry

was appointed to the chair of Oriental Languages at the University of Pest, and he subsequently published various books on Central Asian subjects. He also contributed letters to English newspapers, and has repeatedly delivered lectures in this country on those same topics.

The career of few men can surpass that of Armenius Vambéry as an example of what can be done by "the force of perseverance." Vambéry's mother had, as we have seen, predicted that with the help of this force her crippled and poverty-stricken son would eventually be in advance of his scoffing comrades. He relied on her prediction, and, though his playmates outran him on the village green, the lad who limped, both as boy and man, but stuck bravely and cheerfully to the task he set before himself, beat them all in that greater race for the prizes of life for which each one of us, whether cripple or sound in limb, may regard himself as eligible.

THE END



漢七圖下 洋行空產  
拾四部 拾六冊之內







